Aalto University
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UTILIZATION OF AI IN B2B SALES

Multi-case study with B2B sales organizations and sales technology providers

Master's Thesis
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Abstract

The development of ICT has had a profound impact on sales organizations as sales technology has been widely deployed to facilitate the daily work of sales force as well as sales managerial activities. Nowadays, such technologies inherently support B2B sales processes in multiple ways and have direct impact on the performance of sales force and eventually the generated revenue.

Meanwhile, Artificial Intelligence (AI) has been developing rapidly and it has proven to have various viable applications to enhance business processes across various industries and business functions. As the technology develops further, it is likely to have more and more viable applications and this will likely unleash a new wave of AI-powered sales technologies that will have a profound impact on B2B sales. However, utilization of AI in B2B sales is yet a quite novel topic and has not received wide attention in academia.

This thesis explores the topic by examining the B2B sales process and how AI can contribute to the different stages and activities of the process. The existing framework for examining the process is value-based selling, which proposes that a B2B sales process consist of five stages and respective sales activities. Furthermore, the thesis also addresses higher-level opportunities and challenges of utilizing AI in B2B sales.

The thesis was conducted as a qualitative multi-case study with interviewees from two distinct groups: B2B sales organizations and sales technology provider companies. The sales organizations were interviewed in order to examine the B2B sales process and the technology providers were expected to have most insights into how AI can be utilized in B2B sales. Data was collected through semi-structured interviews with seven sales organizations and eleven sales technology providers. The research utilized an abductive research approach and thus, theoretical research, data collection and data analysis were performed simultaneously.

The results of the study bring forth different use cases of AI in the context of B2B sales and how they can contribute to distinct stages of a B2B sales process. The results indicate that there are potential use cases of AI throughout the B2B sales process, but AI is most applicable during the early stages of B2B sales processes. The biggest opportunity of AI is augmenting the work of humans instead of replacing human labour, while AI can automate some of the most repetitive and rule-based tasks. On the other hand, the greatest challenges of utilizing AI in B2B sales are cultural and organizational, while also technical challenges remain to be solved.

Keywords B2B sales, value-based selling, sales technology, artificial intelligence, machine learning

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Tiivistelmä

Tieto- ja viestintäteknologialla ollut merkittävä vaikutus myyntiorganisaatioihin, kun myyntiteknologiaa on otettu laajasti käyttöön tukemaan myyjien sekä myynninjohdon päivittäistä työtä. Nykyään nämä teknologiat luonnostaan tukevat B2B-myyntiprosesseja monilla tavoilla ja niillä on suora vaikutus myyntiorganisaation tehokkuuteen sekä tämän kautta luotuun liikevaihtoon.

Samaan aikaan tekoäly on kehittynyt nopeasti ja sillä on yhä useampia sovelluksia, joilla voidaan tehostaa liiketoiminnan prosesseja eri toimialoilla ja liiketoiminnoissa. Tekoälyteknologian kehittyessä sillä on enemmän ja enemmän mahdollisia sovelluskohteita ja tämä luo uusia mahdollisuuksia hyödyntää tekoälyä myös B2B-myynnissä. Tekoälyn hyödyntäminen B2B-myynnissä on kuitenkin hyvin uusi aihe eikä se ole saanut vielä merkittävää huomiota akateemisessa kirjallisuudessa.

Tämä tutkielma tarkastelee B2B-myyntiprosessia ja miten tekoälyä voisi hyödyntää myyntiprosessin eri vaiheissa ja myynnin aktiviteeteissa. B2B-myyntiä tarkastellaan arvopohjaisen myynnin viitekehyksen kautta, joka kuvaa B2B-myynnin viisivaiheisena prosessina, joihin liittyy tiettyjä myynnin aktiviteettejä. Lisäksi tutkielma käsittelee tekoälyn hyödyntämisen korkeatasoisempia mahdollisuuksia sekä haasteita B2B-myynnissä.

Tutkimus toteutettiin kvalitatiivisena monitapaustutkimuksena haastattelemalla asiantuntijoita kahdesta ryhmästä: B2B-myyntiorganisaatioista sekä myyntiteknologiatarjoajista. Myyntiorganisaatioita haastateltiin B2B-myyntiprosessin tarkastelua varten ja myyntiteknologiatarjoajilla odotettiin olevan paras näkemys tekoälyn hyödyntämisestä myyntiteknologiassa. Aineisto kerättiin puolirakenteisten haastattelujen avulla seitsemän B2B-myyntiorganisaation ja yhdentoista myyntiteknologiatarjoajan kanssa. Tutkielma toteutettiin abduktiivisella lähestymistavalla ja täten kirjallisuuskatsaus sekä datan kerääminen ja analysointi suoritettiin samanaikaisesti.

Tutkimuksen tulokset tuovat esiin tekoälyn käyttötapauksia B2B-myynnin kontekstissa ja miten ne voivat tukea B2B-myyntiprosessin eri vaiheita. Tulokset osoittavat, että tekoälyä voidaan hyödyntää läpi myyntiprosessin eri vaiheiden, mutta sitä voidaan hyödyntää parhaiten B2B-myyntiprosessin alkuvaiheissa. Tekoälyn suurin mahdollisuus B2B-myynnin kontekstissa on tukea myyjiä työssään eikä heidän korvaamisensa, vaikkakin tekoäly voi automatisoida joitain toistuvia ja sääntöpohjaisia työtehtäviä. Suurimmat haasteet liittyen tekoälyn hyödyntämiseen B2B-myynnissä ovat kulttuurisia ja organisationaalisia, vaikka myös teknisiä haasteita on vielä ratkottavaksi.

Avainsanat B2B-myynti, arvopohjainen myynti, myyntiteknologia, tekoäly, koneoppiminen

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1 Introduction

This chapter firstly presents the background as well as both academic and practical motivations of the study. Secondly, the study is outlined with research objectives and scope as well as research questions. Thirdly, this chapter presents the structure of this thesis.

1.1 Background and motivation

During the last few decades, the evolution of information and communications technology has had a profound impact on how sales organizations operate. Sales technology can facilitate new ways of working as well as open both new opportunities and challenges for sales professionals (Cuevas, 2018). Being able to sell products or services efficiently is essential for the success of any company and sales technology has the potential to increase sales efficiency as well as generated revenue significantly. Utilization of sales technology has impact on both tactical and strategical levels of sales, as it can enable sales force to perform their daily sales activities more systematically and efficiently as well as enable sales managers to perform managerial activities, such as sales funnel management, in a better and data-driven manner.

It has been generally agreed that companies should aim at increasing utilization of sales technology as it has positive impact on the performance of sales force in terms of job performance and relationship performance (Upadhyay et al. 2018). B2B sales processes can be complex, time-consuming and typically consist of multiple sales activities over a long period of time, in which sales technology can aid both sales force and sales managers. Nowadays, performing these B2B sales processes are inherently supported by information technology such as CRM systems and other digital sales tools, and utilizing such technologies have become a part of a sales professional's everyday work.

Meanwhile, Artificial Intelligence (AI) has been developing rapidly during the last decades and it has been even described as a general-purpose technology similar to invention of electricity (Brynjolfsson et al., 2017). AI has so far proven to have many viable applications to enhance business processes across various industries and business functions. While the amount of data keeps growing at a rapid pace and AI software algorithms as well as computing power of hardware develops further, the number of potential applications of AI increases (Quarteroni, 2018). It is highly likely that this

development of AI will also unleash a new wave of AI-powered sales technology tools that will have a profound impact on B2B sales. In fact, Limbu et al. (2014) suggested that B2B companies should not merely rely on traditional sales technologies, such as SFA and CRM, but also adopt and utilize new and emerging ICTs, such as AI.

However, utilization of AI in B2B sales is yet a quite novel topic and has not received wide attention in academia. Although there already exists some relevant literature related to this research area, such as integrating AI into CRM systems (Chatterjee et al., 2019), utilizing AI in marketing (Jarek & Mazurek, 2019) and how AI could contribute to the 7-step sales process (Paschen et al., 2020), it is noteworthy that most peer-reviewed articles in this research area have been published during the last few years, which brings forth the novelty of the topic. According to Seymour et al. (2018), information science studies often play catch-up with applications of novel technologies utilized in the industry, and this is likely also the case when it comes to utilizing AI in B2B sales. Hence, there is a need for more extensive research on the topic in order to bridge the gap between current academic research and how AI is currently utilized in B2B sales in the industry.

The research topic has also clear practical and managerial implications. It is in sales leaders' interest to optimize the performance of their sales force (Cron et al, 2014) and this can be achieved by utilizing the best available sales technology. Many more established sales technology companies such as major CRM providers have started developing AI capabilities into their offerings and there is a number of new startup companies offering AI-enabled tools for enhancing different sales activities. According to Marketing AI Institute (2019), funding for AI-based sales and marketing technology provider companies has already exceeded $5 billion dollars, which is a clear sign of credit for this emerging industry. Well-performing sales teams are almost five times more likely to utilize AI (Salesforce, 2018), which is an incentive for sales leaders to start deploying such technologies more widely. As the sales technology market develops and AI-enabled solution emerge, sales leaders would benefit from having an overview of how AI could be beneficial to their sales organizations in order to adapt the technology more successfully.

Due to these theoretical and practical motivations, this thesis aims at building a comprehensive overview of how AI can contribute to B2B sales as a business function. The thesis is commissioned by Columbia Road, a leading digital sales consultancy in the Nordics, and the research aims at enabling the commissioning company to gain insights on the novel topic of utilizing AI in B2B sales. The results of this research will guide the commissioning company in advising client companies on such matters.

1.2 Research objective, scope and research questions

This thesis explores how AI could contribute to B2B sales through examining the B2B sales process and how AI could be utilized to enhance different stages and activities of the process. While the scope of the research is left quite broad due to the novelty of the topic, the objective is to gain concrete insights into how AI can be utilized in different activities of B2B sales processes. In the scope of this study, these activities involve all the activities performed by both sales force as well as sales managers. The existing framework for examining B2B sales is value-based selling (Töytäri, 2018), which describes B2B sales as a five-step process, through which the empirical findings of the study are examined. Moreover, this research also aims at identifying and addressing the higher-level opportunities and challenges of utilizing AI in B2B sales in addition to the more concrete and practical level of utilizing AI during the B2B sales process.

The scope of B2B sales is limited to sales of complex solutions that inherently require customization as well as interpersonal and trust-building sales activities (Rodríguez et al., 2020), which leaves sales of simple products and online commerce out of the scope of the study. Furthermore, this study uses AI as an umbrella term that encompasses multiple technologies such as machine learning and natural language processing (Simon, 2019). Thus, the term AI is used interchangeably with technologies such as machine learning as the study's emphasis is not on technical details but business benefits of utilizing AI in B2B sales.

The empirical part of the thesis was conducted as a qualitative multi-case study with the aim to gain insights into the research topic from the industry. Research data was collected with semi-structured interviews with industry experts from two distinct groups: B2B sales organizations and sales technology provider companies. The sales organizations were interviewed to examine B2B sales processes in more detail and how AI is going to impact their work on an operational level. The scope of sales organizations to be interviewed was limited to B2B software companies. On the other hand, sales technology providers were expected to have insights on how AI is currently implemented in their offerings and how AI is utilized by sales professionals to perform different sales activities. The following research questions were formulated based on the research setting:

- **RQ1: How AI can contribute to B2B sales?**
    - RQ1.1: What are the different activities of modern B2B sales?

- RQ1.2: How AI can contribute to the different activities of B2B sales?

- **RQ2: What are the biggest opportunities and challenges of utilizing AI in B2B sales?**

The first research question, *how AI can contribute to B2B sales*, is addressed through two sub-questions. The first sub-question, *what are the different activities of modern B2B sales,* was explored in the interviews with B2B sales organizations and it established the background for addressing the second sub-question, *how AI can contribute to the different activities of B2B sales,* which was primarily examined in the interviews with sales technology providers. The last research question, *what are the biggest opportunities and challenges of utilizing AI in B2B sales*, aimed at identifying the higher-level opportunities and challenges of utilizing AI in B2B sales and it was addressed in the interviews with both B2B sales organizations and sales technology providers.

1.3 Structure of the thesis

The thesis is structured into five main chapters: Introduction, Theoretical Background, Methodology, Results and Discussion.

The first chapter introduces and motivates the research topic as well as formulates the research objectives and questions within the scope of the study.

The second chapter reviews relevant academic literature related to the research problem and defines the key concepts of this study. Literature related to utilizing AI in sales context is addressed and both sales and AI research is reviewed.

The third chapter presents the methodologies of the study and practical choices made during the research process. The chapter explains the research design, method of literature review as well as data collection and data analysis methods utilized in the study. Also, case companies and interview subjects are described in order to establish the background of the research data.

The fourth chapter addresses the findings and results of the empirical part of the study related to the research questions.

The fifth chapter finally summarizes answers and conclusions related to the research questions. Empirical findings are compared to the reviewed literature and the differences as well as similarities are discussed. Theoretical and practical implications of the results are examined and contributions to both academia and industry are discussed.

The chapter lastly evaluates limitations of the study and brings forth identified potential future research topics.

Additionally, Appendix includes other relevant material, such as interview frameworks, related to this study.

2 Theoretical background

The aim of this chapter is to establish a theoretical background for researching and answering the research questions based on existing academic literature. At first, existing sales research literature is reviewed in order to define central concepts of B2B sales and how B2B sales is addressed in the scope of this study. Second, AI literature is discussed in order to define central concepts of the field and how AI is implemented in the business context. Third, existing literature on the utilization of AI in B2B is summarized. Finally, a concluding chapter summarizes the theoretical background provided by existing literature and describes how it relates to the research questions as well as how it has guided conducting this research.

2.1 Sales research

This section reviews academic sales research literature to form the theoretical background for the research problem from the B2B sales perspective. Firstly, the development of B2B sales is shortly addressed. Secondly, B2B sales processes are discussed with the main focus on value-based selling as the guiding framework of the study. Thirdly, sales managerial activities and sales funnel as a concept are addressed to support researching managerial implications of AI in B2B sales. Lastly, existing research on information technology usage in B2B sales is discussed.

2.1.1 Development of B2B sales and emergence of value-based selling

B2B sales business function has developed during the last decades in multiple ways. According to Cuevas (2018), there are three key trends in sales force transformation: new buyer behaviour and rising customer requirements, new information and communication technologies, and increased level of globalization and competition. The first two abovementioned topics are especially relevant in the context of this study, while the impact of globalization and competition on B2B sales is not addressed in the scope of the study. This section focuses on the trend of new buyer behaviour and requirements, which has guided the sales framework selection for the study. Utilization of ICT in B2B sales is the focus point of this study and it is discussed in more detail in section 2.2.4.

First of all, B2B sales has been impacted by changes in relationships between customers and sellers. Customers have taken a stronger role and seek to capture more value by segmenting suppliers and utilizing other procurement strategies (Cuevas, 2018). Therefore, the process of creating value for the customer has changed. Rigidly pre-determined products or services ignore the opportunities to co-create value in collaboration with the customer, which requires adapting the offering to suit the buyer's specific needs (Viio & Grönroos, 2014). In modern times, buyers have more information and better visibility to the market which they can use to their advantage in negotiating higher demands from the selling organization (Herbst et al., 2011). This development forces selling organizations to be able to demonstrate value in new ways, which is required for successful sales in the environment of increasing customer expectations.

Due to these reasons, the guiding sales framework selected for the study is value-based selling proposed by Töytäri (2018), which is a proactive and customer value-focused sales approach. This transformation of sales is related to service transformation, the shift from product logic to solution logic, which has brought significant changes to business logic, offerings, relationships and organizational functions, such as sales. Traditionally, short-term transactional efficiencies have been often prioritized in sales, whereas value-based selling emphasizes long-term customer lifecycle value. According to Eades (2003), "misalignment with buyers is one of selling's most critical mistakes" and in value-based solution selling, the sales process is delicately aligned with the prospective customer's buying process, involving different stages and activities occurring during the buying process. Due to the changes in seller-buyer dynamics, selling and buying should not be examined as separated processes but as a joint process (Töytäri, 2018).

Many companies are keen on building new capabilities to avoid the "commodity trap" by utilizing value-based strategies (Töytäri, 2015). The key to selling successfully is gaining customer insights by mapping customers' buying processes as well as business goals and challenges in order to identify improvement opportunities. This information is utilized to form a value proposition, which is communicated, adapted, quantified and eventually verified in order to initiate a business relationship (Töytäri, 2018).

2.1.2 B2B sales process and value-based selling

A sales process represents the activities and actions that a seller performs when aiming at a business engagement with a prospective buyer (Viio & Grönroos, 2014). It describes the

activities in a chronological order that are required to establish a new clientship, from initial prospecting and contacting to ending up in an agreement and closing of the deal. A sales process aligns individuals within a sales organization and determines what are the next step selling activities with sales leads that result in a higher likelihood of success (Eades, 2003).

Many different sales activities take place during this process, such as scheduling appointments, having internal meetings and providing technical support when required (Barber & Tietje, 2008). Although sales processes are designed to build structure for performing sales, B2B sales cases can be very complex and vary case by case, and therefore, sales professionals need to adapt their selling process accordingly to customers' buying process. Arndt and Hankins (2013) argued that sales activities vary based on four changing dimensions: (1) workload, time and effort required to perform the activity, (2) customization, how much the activity must be adapted to fit the situation, (3) complexity, the difficulty of completing the activity and (4) prequalification risk, the importance of the activities for selecting desirable customers. The focus of this study is on more complex and customized B2B solution sales, which require a significant amount of human work and interaction.

Different frameworks for describing a B2B sales process have been discussed in academia. The seven-step selling process (Dubinsky, 1981) is probably one of the oldest sales process frameworks and it has been utilized in multiple studies for examining B2B sales. However, the framework paints B2B sales as more of a transactional and selling-oriented process and given the changed dynamics of the buyer-seller relationships, the framework is not very suitable for examining modern B2B solution sales. Moncrief & Marshall (2005) did develop an evolved version of the 7-step sales process that emphasizes the importance of relationship selling and creating value for the customer, which aligns better with how B2B sales are conducted nowadays. Such perspective is also taken in value-based selling (Töytäri, 2018), which describes B2B sales as a less transactional and more customer-oriented rather than selling-oriented process.

Value-based selling framework describes five distinct stages in a sales process which are aligned with buyer's buying process (Töytäri, 2018). This establishes a structured way in which sales organizations perform their sales and identify value creation opportunities with prospective customers. Furthermore, the framework enables convenient examination of how AI can contribute to the different stages and activities of the selling process. According to the framework, the five stages of selling are customer selection, opportunity

identification, solution development, preference building and agreement. Activities occurring during these different stages of the process aim at identifying and developing key stakeholder relationships, influencing customer's incentives and decision-making as well as aligning the selling and the buying processes. Figure 1 presents the framework and different stages of a sales process linked to a respective buying process.

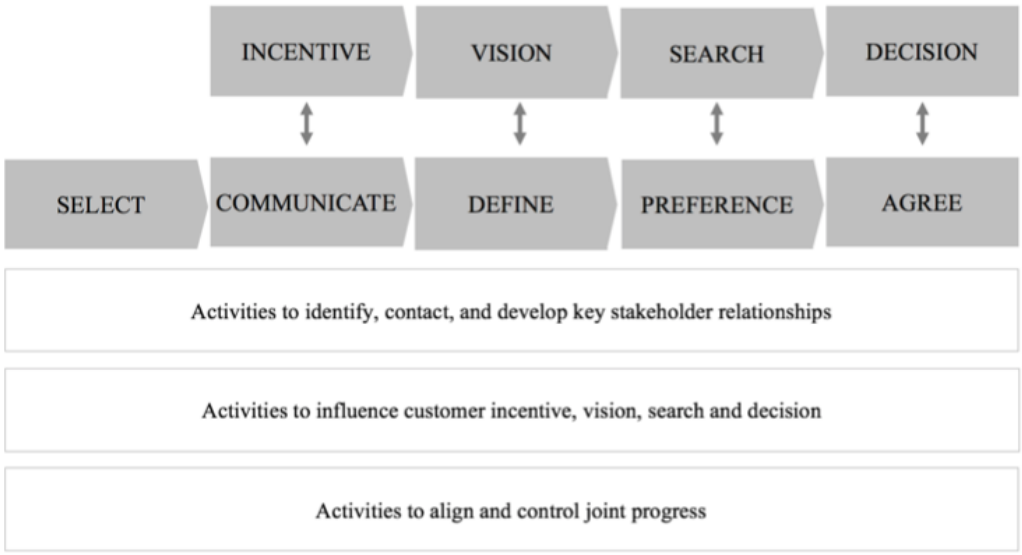

Figure 1: Value-based selling framework (Töytäri, 2018)

Customer selection is the first phase of a sales process which aims at selecting customers and stakeholders who comply with the criteria applied while building customer insights and the offered value proposition (Töytäri, 2018). Well-selected customers provide higher profits in the future (Venkatesan & Kumar, 2004) and when the selected target customers match well with the defined value proposition, the likelihood to initiate fruitful sales discussions is higher. The next steps of the sales process and customer engagement require that the proposed value is perceived as beneficial by the engaged buyer (Töytäri, 2018), which makes customer selection the essential starting point of a sales process. This part of the sales process happens at the top of the sales funnel.

The second part of the sales process, opportunity identification, aims at discovering sales opportunities by influencing the needs and challenges perceived by potential customers (Töytäri, 2018). There can be a value perception mismatch between the seller and the buyer, and proactive value-based sellers can go beyond customers' currently identified needs when communicating value by understanding their business drivers (Terho

et al., 2012). In order to influence buyers' value perceptions, value-based sellers need to gain insights about their customer's buying process early on in order to communicate the value proposition effectively (Töytäri, 2018). During this stage, the value proposition is also often adapted and iterated based on the buyer's specific situation and context because value propositions are often designed to cater large customer segments, which may leave a gap between the value proposition's generic scope and buyer's individual and specific needs (Töytäri & Rajala, 2015).

In the third part of the sales process, solution development, seller aims at defining a solution that aligns optimally with seller's and buyer's resources and goals (Töytäri, 2018). The buyer has previously defined a solution vision to which the seller develops a solution proposal based on the exchange of information during the sales process. Naturally, there can be a conflict between buyer's and seller's perceptions about the ideal solution vision and therefore, it is essential to involve the customer in co-creation of the proposed solution (Terho et al., 2012). At this stage, an efficient way to influence buyer's solution vision is quantifying the potential value of the proposed solution (Terho et al., 2012), such as revenue increase or cost reduction. The key for succeeding as a seller is to engage with the customer and influence their solution vision early enough before their buying process goes past the solution vision development. As Viio & Grönroos (2014) proposed, the seller might need to adapt their sales process according to singular buyer's buying process and thus, seller benefits from having an understanding of buyer's buying process and when the solution vision is created.

During the buying process, buyers identify and engage with multiple suppliers who offer alternatives to satisfying the buyers' business needs and they eventually select a supplier (Makhitha, 2015). The fourth part of the selling process, preference building, relates to this stage of the buying process where the seller aims at building competitive preference over alternative solutions (Töytäri, 2018). The preference is built based on the potentially created economical value as well as addressing previously defined challenges with seller's solution definition. Seller's ability to deliver and participate in the co-creation of value is also evaluated by the buyer and these conceptions should be influenced (Töytäri, 2018). This phase of the sales process also defines a common plan for planning, evaluating and decision-making activities during the rest of the joint process.

Lastly, a sales process ends in an agreement after a joint solution vision has been created. This part of the process involves agreeing on value constellation and value sharing. Implementing the solution requires commitments from both the seller and the

buyer and value constellation indicates the roles, capabilities and resources required from both sides to implement the solution. The created value and its sharing are closely related to pricing and this requires tying pricing to the created value. (Töytäri, 2018)

While the value-based selling framework describes an end-to-end sales process, it disregards the next steps after a clientship is established. Dubinsky's (1981) 7-step sales process framework proposed that the last part of a sales process is follow up, because the customer journey continues after a sales case has been closed. In fact, it has been argued that companies should focus their efforts on retaining existing customers instead of acquiring new ones as it has become easier and less costly for customers to switch between competitors due to better access to information (Tamaddoni Jahromi et al., 2014). This phenomenon also emerged in the interviews with sales organizations and therefore, customer success activities occurring after agreement are examined in the empirical part of the thesis. As a result, an improvement suggestion for the current value-based selling framework is made.

2.1.3 Sales management and sales funnel

This study aims at also exploring the impact of AI on sales management and therefore, managerial concepts related to B2B sales are shortly addressed. Powers et al. (2014) summarized important sales management skills discussed in existing sales literature and brought forth that good sales managers are able to e.g., provide effective feedback and manage team dynamics as well as be aware of cultural issues and understand salesperson evaluation metrics. Furthermore, their research addressed that great sales managers are capable of implementing sales force automation and CRM processes as well as understanding the importance of new technology.

It could be concluded that sales managers need to possess certain soft skills to lead and coach their sales force, in which sales technology can support them by e.g., having the appropriate data for providing concrete feedback and managing sales team dynamics. On the other hand, sales leaders are the ones responsible for implementation and effective utilization of sales technology and they need to be able to understand the benefits of implementing new technologies as well as manage cultural issues that might hurdle utilization of such technologies. This is expected to be the case when it comes to utilizing AI in B2B sales as well.

Overall, it is in sales leaders' interest to coordinate their sales force to perform sales and reach revenue targets as efficiently as possible. According to Badrinarayanan et al. (2019), sales managers have the role of developing and leveraging organizational resources to obtain optimal organizational outcomes. Moreover, sales leaders are in charge of sales planning as well as ongoing sales forecasting in order to evaluate whether the sales targets are being reached (Havlíček & Ondřej, 2013). While a sales process indicates how a singular deal progresses through different steps of selling, a sales funnel tracks how multiple deals flow through sales processes (Davies, 2010). Sales processes consist of hands-on actions performed by sales representatives during interactions with potential customers, whereas sales funnel is a more of a managerial tool for sales leaders that enables efficient coordination of sales activities. According to Davies (2010), sales funnel provides the following information to help evaluate the state of projected sales:

- How each customer is progressing through the sales process
- Amount of value associated with the sales opportunity
- How long time it requires for customers to move down the funnel
- Number of customers at each step of the sales process
- Revenue forecasts for cash flow statements

Sales funnel is a metaphor that refers to gradual narrowing of sales opportunities into closed deals. Figure 2 demonstrates how customers flow through the sales process; some deals do not succeed while confidence in the remaining deals increases. Setting up a sales funnel requires estimating hypothetical probabilities of closing the deal at each step in the sales process while the likelihood to purchase increases when customers flow from top of the funnel to bottom of the funnel. Once the probabilities have been assessed, contract values can be assigned to different sales opportunities and this enables representing all the ongoing deals in a single spreadsheet. When all potential deals are systematically tracked in the sales funnel, the weighted values provide sales leaders with actionable information on what actual monetary value can be gained from a group of ongoing sales opportunities. As a result, sales leaders are able to get an overview of how their sales organization is performing as a whole as well as identify potential challenges and bottlenecks within the current sales opportunities.

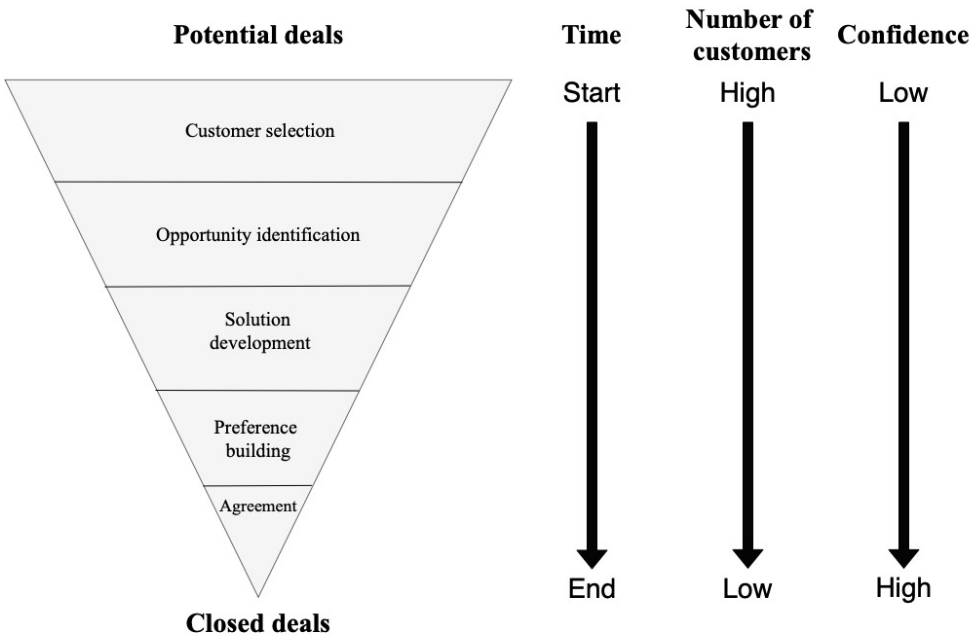

Figure 2: Properties of a sales funnel

2.1.4 Utilization of sales technology in B2B sales

The role of sales professionals has been constantly evolving along with development of digitalization and enabling technologies, which has transformed how salespeople engage with prospects and customers as well as how sales are managed (Rodriguez et al., 2014). This is also the focus point of this thesis with the aim to investigate how AI could contribute to different B2B sales activities. Hunter & Perreault (2006) defined sales technology as information technology that facilitates and enables salespeople to perform sales tasks. This definition of sales technology encompasses both mature technologies such as mobile phones, e-mails and databases as well as more current technologies such as modern CRM systems and other sophisticated digital sales tools, including AI-enabled sales technology.

Utilizing digital sales tools has clear benefits as companies adapting sales force automation technology tend to have more efficient salesforce (Qehaja et al., 2016). B2B companies spend hundreds of millions of dollars annually on implementing sales technology in order to enhance productivity, communications and customer relationships (Rodriguez & Honeycutt, 2011). Utilizing sales technologies, such as CRMs, allow companies to enhance internal collaboration as well as sales performance. Sales technology can improve individual salesperson's productivity by supporting them to e.g.

generate sales leads efficiently, type sales reports systematically, communicate and review information effectively and decrease non-selling time (Bush et al., 2010). Nowadays, information systems enable sales force to access, synthesize and analyse customer data conveniently.

In fact, CRM has become an essential technology for any kind of company as a way to acquire new customers as well as retain existing ones (Luftman et al., 2015). Sales technology has enhanced sales operations by facilitating customer interactions as well as helping sales organizations to understand their own cost structures and customer profitability, which has clear managerial implications. They key benefit behind utilization of sales technology is combining individual salesperson's tacit customer insights with information across the whole sales organization in order to enable efficient customer relationship management and identifying untapped sales opportunities. In fact, customer insight has become an organizational capability through utilization of ICT and CRM systems (Maklan & Knox, 2009) and individual salespeople are no longer the sole source of customer knowledge which makes information less tacit. As a result, sales technology has improved the communications between sales representatives within an organization as well as with its partners (Hollenback et al., 2009). On the other hand, customers are also able to retrieve information through internet (Sheth & Sharma, 2008), which has likewise impacted salesperson's traditional role as the primary source of information.

However, implementing sales technology is not straightforward according to existing literature. The frequent failures of CRM system adoption were discussed by Kim et al. (2012), as they highlighted that some research suggests that 70% of companies who have invested in CRM projects have not seen sales efficiency improvements and some have even experienced decline in their performance. Pedron et al. (2016) addressed that successful CRM implementation requires organizational culture that supports utilizing the provided tools and the users of the tools, salespeople, need to view these tools as value-adding. Furthermore, the value of sales technology must be demonstrated to individual salespeople by the sales leaders.

When an organization approaches CRM implementation from excessively technological perspective, there is a higher chance of failure compared to business-driven and strategic approach that involves multiple departments, roles and processes. Based on this, sales technology must be closely linked to the sales processes, and also the organizational culture and way of doing sales must align with the utilized tools. Homburg et al. (2010) also addressed the fact that top sales management should facilitate adoption of

new sales force automation tools at several hierarchies in the sales organization, as both sales force and sales supervisors must be on board in order to drive organizational change.

A recent study by Rodríguez et al. (2020) addressed the current state of digitalizing complex B2B sales processes and brought forth that while progress has been made, face-to-face encounters are still required especially in the later stages of complex B2B sales processes. While digitalization can support salespeople in activities such as identifying potential customers and post-sale support, digital interfaces are not able to completely replace human encounters and therefore, full digitalization cannot be achieved in the context of more complex B2B sales. The main role and key benefit of digitalization is to enable salespeople to use their time more efficiently and it may aid in replacing some face-to-face encounters with digital ones at less critical stages of the sales process (Rodríguez et al, 2020).

2.2 Artificial intelligence

The purpose of this section is to discuss relevant academic literature related to artificial intelligence in order to provide the theoretical background for addressing AI in the scope of the study. Firstly, the concept of AI is shortly introduced along with definition of AI in the scope of this study. Secondly, literature related implementing AI in the business context is reviewed as these observations are likely to apply in the B2B sales context as well.

2.2.1 Introduction to artificial intelligence

There has been a growing interest towards AI in both academia and the industry during the last decades. The recent development of the technology has been driven by advancements in cognitive mechanisms and learning capabilities of machines (Jarek & Mazurek, 2019). When computing power increases and AI software algorithms keep developing further, AI is going to have more and more viable applications in the business context as well. Brynjolfsson et al. (2017) have even described AI as a general-purpose technology similar to electricity and steam engines, which were transformational technologies in the past. According to technology trend survey by Gartner (2018), AI is the most important strategic technology that has the potential to support decision-making, reinvent business models and ecosystems as well as enhance customer experience, which will drive digital initiatives in

the future. It has also been estimated that in 2030 AI might contribute even 15.7 trillion dollars to the global economy (PwC, 2017).

While the disruptive potential of AI has been widely recognized, there is still no general consensus on the exact definition of AI as the viewpoints have fluctuated over time (Simon, 2019). Generally, AI refers to "the ability of machines to mimic intelligent human behaviour" and perform cognitive functions such as problem solving and learning, which we tend to associate with human mind (Syam and Sharma, 2018). Furthermore, AI is also often separated to narrow or applied AI and strong or general AI (Goertzel, 2014). The former refers to AI that can solve limited practical problems whereas the latter seeks to engineer human-level adaptability to multiple use cases. However, we are not likely to see any kind of general AI in the near future (Montjoye et al., 2017). Applied or narrow AI is the focus point in the context of this study, as the currently available AI solutions belong to the category of narrow AI. Regardless of whether general artificial intelligence could become reality in the future, examining this area of artificial intelligence in the context of B2B sales is not reasonable given the current state of the technology.

This study approaches the concept of AI with the definition proposed by Simon (2019): AI is an umbrella term that embodies multiple technologies such as machine learning, deep learning, computer vision and natural language processing. This point of view is suitable for examining AI in the context of B2B sales since AI-powered sales technologies utilize above-mentioned technologies or combinations of them to enhance or automate specific activities occurring during B2B sales processes. Therefore, term AI is used interchangeably with above-mentioned cognitive technologies in this research.

Machine learning and natural language processing were deemed to be the most important technologies under the umbrella term of AI based on the empirical findings of the study and are shortly defined below. This study does not take a stand on whether other AI technologies could contribute to B2B sales as the study's main focus is on business benefits of AI instead of technical details.

Machine Learning

Machine learning refers to a subset of artificial intelligence that enables computers to learn and improve over time from data without being explicitly programmed (Samuel, 1959). Machine learning algorithms can make predictions and decisions based on data without following static program instructions and therefore, the technology can be utilized when

programming explicit algorithms is difficult for a particular use case. Practically, a machine learning algorithm is given a task to optimize a designated performance criterion based on data which it learns to perform better over time (Alpaydin, 2011). Machine learning algorithms are often categorized into two main types: supervised learning algorithms and unsupervised learning algorithms (Kanetkar & Chanchlani, 2014).

Supervised learning algorithms are trained with labelled training data sets and they require both input and target output data provided by humans. Once a supervised learning algorithm has analysed a training data set, it creates a derived model to predict target outputs when exposed to new input data set. Supervised learning algorithm modifies its model by comparing its output against the real output values and optimizes the model over time. Supervised learning is often used in applications where past events are likely to predict the future events and its use cases are often divided into two categories, classification and regression. (Preeti, 2017)

On the other hand, unsupervised learning algorithms are utilized when dealing with data sets that do not have historical labels. Unsupervised learning algorithm derives a function in order to find hidden structures in a given unlabelled data set and these kinds of algorithms are often used for solving more complex problems compared to supervised learning. Generally, unsupervised learning is most useful for finding hidden insights and patterns in a data set when there is no available labelled historical data. The potential tasks of unsupervised learning could be divided into clustering and association problems. (Preeti, 2017)

Natural language processing

Natural language processing (NLP) encompasses computational techniques that aim at learning, understanding and producing human language content (Hirschberg & Manning, 2015). There is a continuously increasing amount of unstructured data in natural language over the internet in online communities, company websites or blogs and social media, and this valuable information could be utilized in practical business activities, such as assessing brand perception (Ittoo et al., 2016). According to Simon (2019), the current research on NLP focuses on developing information systems that are able to interact with people through dialogue instead of barely reacting to stylized requests. The aim of NLP technology is being able to interpret vast amounts of unstructured data in human language format as well as facilitate efficient human-computer interaction.

NLP techniques can be utilized for organizing and interpreting unstructured big data, and it has multiple use cases in the business context. The most common NLP applications are information retrieval, information extraction, machine translation, summarization and text categorization (Taskin & Al, 2019). For instance, NLP software could be used to make a competitive analysis by scanning the internet for information about current industry events and competitors' offerings. NLP is also the technology behind chatbots, which are more and more commonly used in both B2C and B2B online commerce. Many companies utilize chatbots, automated social presence, to solve routine service requests from customers while more complex requests are forwarded to trained service employees (Bolton et al., 2018). This is a great example of human-computer collaboration, in which simple tasks can be handled by a computer while more complex tasks are performed by humans.

The biggest current limitation of NLP is that its applications are still mostly available for high-resource languages such as English, French, Spanish and German and the current challenge is to develop NLP tools for less-spoken languages such as Finnish or Indonesian (Hirschberg & Manning, 2015). This seems to be the biggest current limiting factor for utilizing NLP in the sales context, as regional sales teams often communicate in their native language and sales data is often inputted to CRM systems in their native language. However, as NLP technology develops further, the advancements can provide a new means to utilize this large amounts of unstructured sales data even in less-spoken languages, which would enable multiple use cases in the context of B2B sales.

2.2.2 Implementing AI in the business context

AI can be used to improve business operations by embedding algorithms into applications that support organizational processes, which enables automation of repetitive tasks, increases the speed of information analysis and enhances general productivity of work force (Tarafdar et al., 2019). As a result, AI can enhance operational excellence as well as customer and employee experience. Today, AI is being implemented in all walks of life from education and healthcare to industrial fields (Zhang et al., 2019) as well as in traditionally more human-centric business functions such as marketing (Campbell et al., 2020) and customer service (Adam et al., 2020). Therefore, it is likely that AI will also have a significant impact on B2B sales as a business function which is the focus point of this study.

There can be identified three distinct categories of use cases for AI in the business context, which are automating processes, gaining cognitive insights with data analysis and engaging with customers as well as employees (Davenport & Ronanki, 2018). It is important for companies to understand what kind of tasks they are aiming to enhance or automate and choose the utilized technology accordingly. Different types of AI can perform different types of tasks and it is likewise important to comprehend the strengths and limitations they have. For example, machine learning algorithms can be utilized to automate many simple rule-based back-office administrative and financial activities, such as invoicing. Respectively, natural language processing can be utilized to build chatbots that can offer continuous and rapid customer service on a 24/7/365 basis (Blaj et al. 2019).

As AI is an umbrella term that compasses multiple different technologies (Simon, 2019), businesses should have a general understanding of how these different AI technologies can be utilized in particular use cases. Companies who aim at gaining benefits of AI need to have data science competence, technical talent to implement such solutions, as well as business domain proficiency to fully understand business tasks and workflows in order to imagine how AI could improve them (Tarafdar et al, 2019). It has been highlighted that in addition to having enough AI researchers and programmers, companies need to have business leaders who are able to choose the best use cases for AI (Deloitte, 2018).

However, while the amount of AI application implementations has been increasing across different business contexts and use cases, the expectations do not always meet the reality. According to Ross (2018), managers are often enthusiastic about the potential business benefits of AI applications and have reference points such as computers winning at Go or poker in their mind, but in reality, implementing AI to enhance a business process is similar to implementing any enterprise software system. In fact, there are multiple pre-requisites for implementing AI into business processes for which companies need to be ready for before they can successfully adapt AI. Kumar et al. (2019) brought forth five important matters that companies need to take into account in order to implement AI successfully into their business processes: having sufficient data maturity, aligning AI with company goals, establishing articulate control parameters and instructions for how and when AI is implemented, preparing for transformation of workplace as well as addressing ethical and privacy concerns.

First of all, utilizing AI requires plenty of high-quality data and having a well-developed data ecosystem is essential for gaining benefits from AI capabilities. A great

data ecosystem enables data scientist to analyse large amounts of data and gain actionable insights that can guide organization's decision-making (Kumar et al., 2019). Moreover, turning vast amount of data into actionable insights requires effective mechanisms for data processing, aggregation and summarization (Barnaghi et al., 2013). Therefore, having lots of raw data is not useful per se, if its quality is poor and an organization is not able to process it to a more actionable format. It is also crucial for customer-facing business functions to own internal data created in customer interactions as it is nearly impossible to acquire it from external sources (Grover et al., 2018). Furthermore, a well-developed data ecosystem enables combining data from multiple different sources which can contribute remarkable business benefits. For example, enriching traditional CRM data with data from other internal sources such as online channels can help organizations to provide improved and customized customer service towards individual customers (Lehrer et al., 2018).

Second, implementation of AI similarly to any technology implementation requires alignment with organization's business goals. Crews (2019) highlighted that utilizing machine learning should not be viewed as an IT project but as a business function and it requires engaging the whole organization in order to achieve the desired results. AI initiatives tend to involve multiple hierarchies, departments and stakeholders within organizations and therefore, efficient internal collaboration is crucial for the success of AI implementations. Essentially, companies need to develop clear and realistic use cases of AI that define how a business process is enhanced with AI capabilities and how the work will be divided between an AI application and the end-user (Tarafdar et al., 2019). Smith & Eckroth (2017) even argued that "the most important lesson learned by AI system builders is that success depends on integrating into existing workflows - the human context of actual use". AI does not usually completely replace existing work processes and therefore, it must work well with the existing tools that people are using. Unless an AI application is easy to use, employees will easily dismiss it. It could be concluded that employees need to perceive AI as valuable for the hands-on business processes they are working on whereas leaders need to align AI implementation with the longer-term strategic intents of the organization.

Thirdly, utilizing AI requires clear control parameters and guidelines for understanding when and how AI is implemented and utilized. Often times the user is not aware how AI arrives to its conclusions and this black box issue can be problematic for organizations when AI is used to support decision-making (Davenport and Ronanki, 2018). Therefore, understanding the output of AI and utilizing it can be challenging for employees

(Ross, 2018). Handling the randomness of AI's output can be difficult for humans to understand as this requires assessing whether the AI application provides better results than human fallibility (Kumar et al., 2019). This kind of situations will occur when AI is introduced to business processes and companies need to plan in advance and have clear instructions on how they are going to act in such cases. Essentially, companies need to decide who is going to have a last say in what decisions and when trust can be placed in machines to perform the decisions. However, recent focus on developing explainable AI, systems "that provide visibility into how an AI system makes decisions and predictions and executes its action" (Rai, 2020) is likely to help in solving the black box issue.

Fourth, at least current AI applications are mostly about augmenting rather than replacing human efforts. This will create profound changes in how people work as AI could eliminate repetitive and mundane tasks while it simultaneously creates new tasks that require humans and machines collaborating together (Ross, 2018). In fact, Jarrahi (2018) argues that "AI systems should be designed with the intention of augmenting, not replacing, human contributions". Succeeding with AI is possible by combining smart machines with smart people who can learn how to utilize what machines can do for them. While software can conveniently handle and process data, it is not beneficial if employees are inputting poor quality data or do not know what to do with the outputs, information and analysis provided by AI. In order to succeed, employees will need to learn new skills and become fluent in working with AI. Companies can capitalize AI more efficiently by developing workforce's "fusion skills" that enable employees to work effectively at human-computer interface and collaboration between humans and AI should be facilitated (Wilson & Daugherty, 2018). As a result, companies can gain sociotechnical capital through successful collaboration between AI and people which can lead to competitive advantage (Makarius et al, 2020).

Lastly, there are privacy and ethical challenges around utilizing AI. While AI has the ability to enhance and automate business processes, it requires vast amounts of data and its collection and utilization by AI algorithms raises privacy concerns as this data can be personal (Montjoye et al., 2017). This may not be a concern when, for instance, only organization's internal data about manufacturing or distribution is utilized by AI but handling customer data is likely to involve such privacy issues. Therefore, companies need to decide what types of data they can or cannot collect and use as well as accommodate the privacy requirements (Kumar et al., 2019). Furthermore, AI models can make biased and unfair decisions based on sensitive data points, such as individual's race, age or gender,

which raises serious ethical concerns (Barredo Arrieta et al., 2020). Such issues can be prevalent especially with black box algorithms, which is another reason why explainable AI is needed for real-world AI applications.

2.3 Artificial intelligence in B2B sales

It has been estimated that AI will have the biggest impact in the business context on supply chain management and manufacturing as well as marketing and sales functions across different industries (Kumar et al., 2019). However, currently there exists a lot more academic literature on utilizing AI in industrial contexts compared to utilizing AI in customer-facing business functions such as B2B sales. While utilization of AI in B2B is yet a novel research area in academia, there exists a few peer-reviewed articles on the topic. This section reviews the current literature that addresses utilization of AI from the perspective of a sales funnel or takes another more holistic approach instead of focusing on singular use cases.

Syam & Sharma (2018) researched the impact of machine learning and AI on personal selling and sales management from the perspective of the 7-step selling process, addressing how AI could be beneficial for the different sales activities occurring during the process. Their research proposes a long list of important research questions as issues worthy of future research on the topic. It was highlighted that the most significant impact of automation and technology in sales has been, and continues to be, on all routine and repeatable sales activities.

Furthermore, they also discussed that in the future the greatest impact of digitalization in sales takes place in all the activities that aim at understanding customer behaviour in order to deliver highly customized offerings. In B2B context, this means understanding all the activities in the buying process, the order in which they are executed as well as the roles and key actors behind these buying processes. This is closely related to the viewpoint of value-based selling (Töytäri, 2018), which aims at aligning selling and buying processes for co-creation of value. Syam and Sharma (2018) predict that AI can be utilized to simulate the buying centers with their complexities which will allow salespeople to predict potential roadblocks when interacting with the buying center. Their study suggests that machine learning and AI will have a profound impact on the functions of personal selling and sales management.

Moreover, Paschen et al. (2020) also researched how AI could contribute to sales performance across a sales funnel during the 7-step process of B2B selling. They similarly predicted that AI would create fundamental changes in B2B sales processes and that AI is not going to replace humans but support their work and automate some of the tasks previously performed by people. While their research did not add much to the previous research by Syam & Sharma (2018) on how AI could affect the different stages of a sales funnel, their research brought forth managerial considerations for optimizing human-machine collaboration in B2B sales. Their research suggests that managers who are eager to adapt AI are not fully aware what contribution AI may bring to sales processes and matters such as internal trainings and alignment of AI and business processes should be considered when AI is implemented in B2B sales.

Lastly, an article by Singh et al. (2019) addressed concepts, priorities and research questions related to AI's impact on sales profession and professionals. Their article was written based on team-based workshopping and brainstorming organized at AMA New Horizon Faculty Consortium where sales researchers collaborated to identify future research directions for utilization of AI in sales. According to Singh et al. (2019), the examination of AI's impact on sales could be examined through three distinct levels: (1) how AI will impact value creation for customers, (2) how AI will impact sales organizations and (3) how AI will impact the role of individual salesperson. Furthermore, they propose tens of research questions and priorities related to these concepts.

While these articles aim at establishing a foundation for researching the topic, they propose more research questions than provide answers. They paint the bigger picture and future vision of AI-enabled sales funnels' opportunities, but they lack empirical evidence on how sales organizations can actually and realistically utilize AI in practice. They do not investigate B2B sales processes in detail in order to examine what different activities could be enhanced or automated with AI capabilities and the potential of AI for sales management is not addressed. Furthermore, the current research does not specifically address the context of complex B2B solution sales. Due to these reasons, more comprehensive research and empirical evidence is required for validating the potential impact of AI on B2B solution sales.

2.4 Concluding the theoretical background

The theoretical background chapter established the lens for examining the research problem during the empirical research of the study. At first, section 2.1 reviewed literature related to B2B sales in order to introduce the business function. Value-based selling was described in more detail as it was chosen as the framework for examining how AI could contribute to different activities of B2B sales. The framework was deemed as the most viable sales theory for this research as it is very applicable in the context of selling complex B2B solutions. The sales process proposed by value-based selling theory was described in more detail and the managerial aspects of B2B sales were introduced as the study aims at discovering how AI could affect activities performed by both sales force as well as sales managers. Lastly, existing academic literature on sales technology was reviewed as observations on implementations of previous sales technologies will likely apply to implementing AI in B2B sales.

Secondly, section 2.2 introduced the most important concepts of AI and defined the meaning of AI in the context of this study. In the study, AI will be used as an umbrella term for different technologies such as machine learning and natural language processing and these applications belong to the category of narrow AI. Furthermore, literature related to implementing AI in the business context was reviewed as these findings were assumed to apply in the B2B sales context as well. In addition to describing the potential benefits of AI, the existing literature addresses many of the challenges related to utilizing AI in business functions which guided critical examination of how AI could fit into B2B sales business function.

Lastly, section 2.3 reviewed previous literature related to utilizing AI in B2B sales. While the topic is yet quite novel in academia, these existing articles pointed out the relevance of the research topic and provided research questions and issues worthy of further studying. However, the articles did not have empirical evidence to support their findings and therefore, their contributions were not strictly used to scope this study.

Nevertheless, few main assumptions were made based on the existing literature to guide the empirical research of this study. Firstly, B2B sales is not going to get fully automated any time soon but AI could support humans and eventually automate some of the simplest sales activities. Secondly, AI has the potential to contribute to B2B sales throughout the sales process and its implications could be very holistic. Thirdly, gaining value out of AI in B2B sales is not a straightforward process and challenges as well as

managerial considerations related to implementing AI need to be addressed in the B2B sales context. Lastly, the impact of AI on B2B sales can be holistic: it can influence value creation with customers as well as the work of sales organizations and the role of individual sales professionals.

3 Methodology

This chapter presents the methodology used in the theoretical and empirical parts of the thesis. As Eisenhardt (1989) proposed, it is important to provide the reader with sufficient information that enables evaluating the research procedures and outcomes. The purpose of the chapter is to provide transparency on how the thesis has been conducted by describing methodological practices as well as practical choices made during planning, conducting and reporting the research.

This chapter is structured as follows. At first, the research design and research process of the thesis are introduced. Secondly, the method of literature review is shortly described. Thirdly, the data collection methods and case companies are described in order to bring forth the background of the research data. Lastly, data analysis methods of the study are presented.

3.1 Research design

This research was conducted by utilizing abductive research approach, systematic combining method introduced by Dubois and Gadde (2002). There were two main motivations for selecting systematic combining as the research approach for the study. Firstly, the study aimed at exploring a novel topic and systematic combining method as a research approach aims at discovering new dimensions of a research problem. Secondly, the wideness of the research topic - how AI could impact B2B sales - required an iterative research approach and systematic combining allowed to avoid excessively fixed scoping of the study before starting empirical research. The study was inherently explorative and overly rigid scope and focus points of the study could have prevented from uncovering unexpected but significant topics with respect to the research problem. Due to the exploratory nature of the thesis, abductive research approach allowed matching existing theory and literature with empirical findings (Dubois and Gadde, 2002), which aided in directing the research process.

The framework for examining B2B sales in the context of this study was value-based selling proposed by Töytäri (2018). While utilization of AI in B2B sales is a novel and broad topic, its examination was convenient to structure through the lens of an existing sales theory that describes stages and activities occurring during a sales process. As Dubois & Gadde (2002) suggested, having a tight as well as evolving framework is fruitful for

abductive research. The preconceptions of the study were articulated through the tight framework, value-based selling, while it was expected to evolve during the research process through empirical observations.

The empirical part of this thesis was conducted as a multi-case study with interviewees from two distinct groups: sales organizations of B2B software companies and sales technology provider companies. This choice was made in order to gain a more holistic picture of how modern B2B sales organizations conduct their sales and how AI could fit into this picture. While sales organizations are the optimal source of information with respect to how B2B sales are performed nowadays, they are not experts on current possibilities of utilizing AI in their work which can be recognized through the low adaption of such technologies in the industry.

On the other hand, sales technology providers have the best view on research and development of AI-powered sales tools, but they do not have as concrete insights on the operational level of conducting B2B sales as the sales organizations have. Due to these reasons, the main assumption in the design of this research was that interviewing both groups would be essential to gain a holistic as well as realistic overview of how AI can fit into modern B2B sales. Utilization of AI in B2B sales is not examined as an own entity but linked directly to the empirical observations on how the case sales organizations described their sales processes and activities. While this made the research process more complex, excessively simplistic research design was avoided to make room for diversity and complexity in the research (Eriksson & Kovalainen, 2008).

The research question setting and related cases are illustrated below in Figure 3. The first research question, *how AI can contribute to B2B sales*, was addressed through two sub-questions. The interviews with seven sales organizations primarily aimed at providing insights into the first sub-question, *what are the different activities of modern B2B sales*. While the study's main focus was on RQ1 and RQ2, utilization of AI in B2B sales, the first sub-question aimed at providing insights into how modern B2B sales organizations perform their sales in order to have a background for examining the respective use cases of AI. Furthermore, this enabled developing the primary theoretical framework, value-based selling, further as well as observing the gaps between activities that are needed to be performed in B2B sales and what AI is currently capable of. The interviews with sales organizations also secondarily provided observations related to the second research question from an end-user point of view.

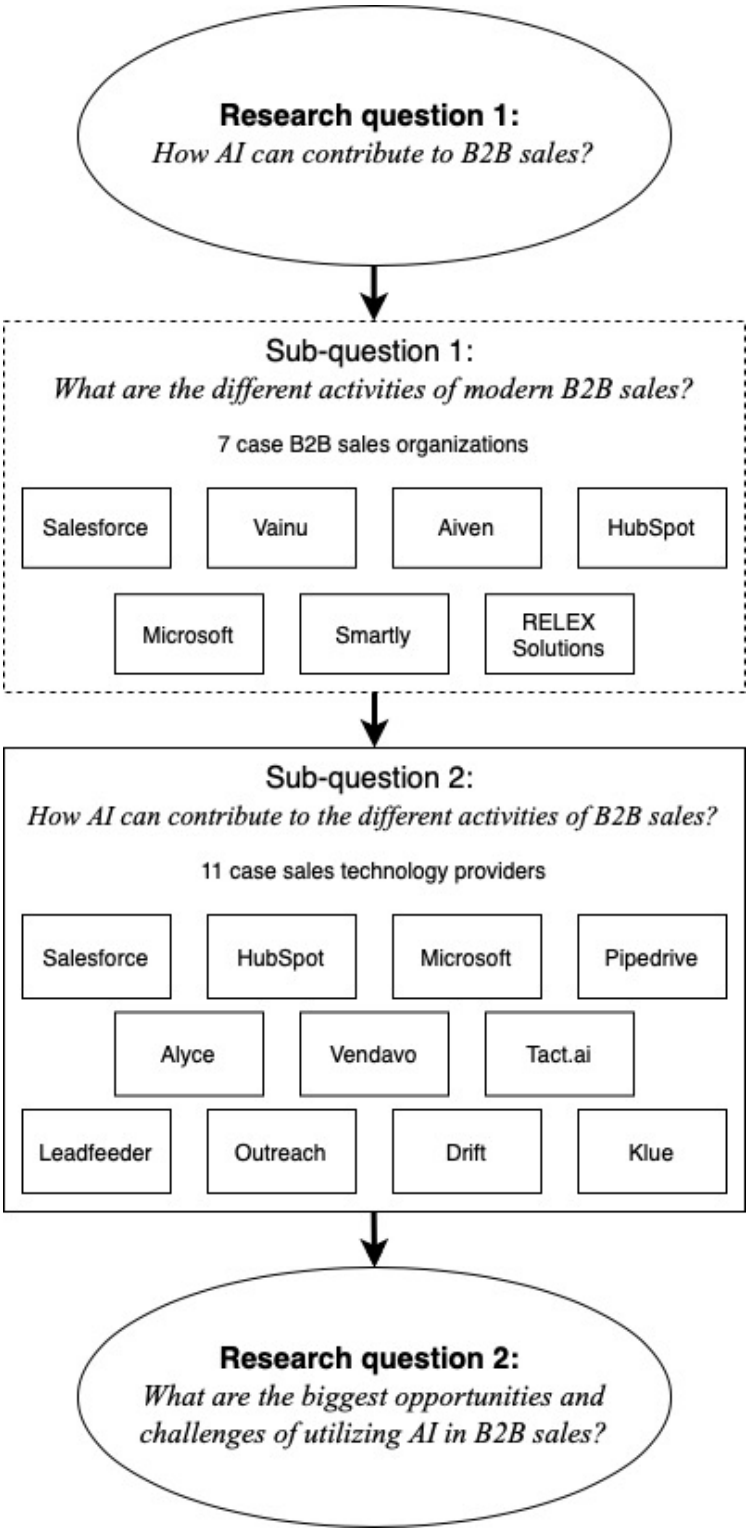

Figure 3: Research question setting and selected cases for answering the questions

The second sub-question, *how AI can contribute to the different activities of B2B sales*, was primarily investigated through the interviews with sales technology providers. Eleven different sales technology providers with distinct offerings were interviewed to

identify different use cases of AI in the context of B2B sales. These empirical observations were linked to the previously described B2B sales activities in the interviews with sales organizations in order to address the first research question through the sub-questions. The findings related to RQ1 are presented in section 4.1.

The second research question, *what are the biggest opportunities and challenges of utilizing AI in B2B sales*, is related to the higher-level and more future-oriented opportunities of utilizing AI in B2B as well as the practical challenges and limitations of implementing and utilizing AI in B2B sales. These kinds of topics were addressed in the interviews in addition to the practical sales activities as well as respective AI use cases and are presented in sections 4.2 and 4.3.

The research was carried out as case study as it is a suitable research strategy for addressing complex managerial or business issues, which are challenging to study with quantitative methodologies (Eriksson & Kovalainen, 2008). Furthermore, the research was conducted as a multi-case study for two reasons: (1) the aim of the study was to interview people from both above-mentioned groups and (2) no singular organization or person has complete understanding of such a wide and novel topic as utilizing AI in B2B sales. While a single case study can provide more depth into a research problem, multi-case studies allow more breadth for the research (Dubois & Gadde, 2002), which was required for researching the novel topic in question. Furthermore, collecting data with the two distinct interviewee groups enabled data triangulation in the study (Eriksson & Kovalainen, 2008) as clashing opinions between the two interviewee groups could be examined.

The role of qualitative researcher in the context of this research is mainly translator or interpreter, which aims at understanding the interviewees' points of view and translating these into text (Eriksson & Kovalainen 2008). The empirical data of the thesis is primarily presented in a theory-guided manner, meaning that writing of the results was guided by a theory used in the study (Chenail, 1995). The theory in the context of this thesis was value-based selling, which describes a B2B sales process from the start to the end, to which the empirical findings are linked. However, also important aspects of the research problem outside the scope of value-based selling framework were identified and the study presents them as own entities based on recurring statements in the interviews. The coding system that was used to analyse the interviews is presented in section 3.4.

Research process

Figure 4 presents the high-level research process behind conducting this study. At first, the research plan as well as overall research goals were defined along with initial research questions based on reviewing relevant academic articles as well as other online sources related to the topic. The research plan and goals were evaluated with supervising professors and deemed reasonable as well as worth studying. The scope of the study as well as precise research questions were left very broad at the time in order to allow redirection and iteration based on upcoming literature and empirical research. Multi-case study was chosen as research format of the study and an initial list of potential case companies was created.

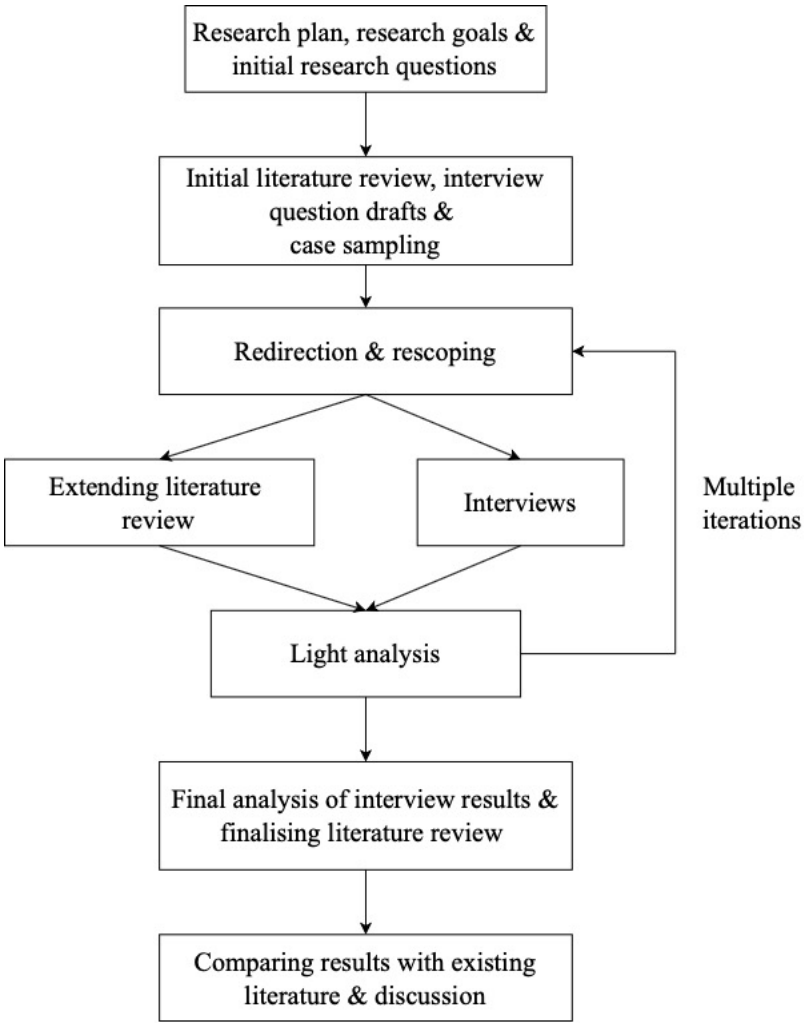

Figure 4: Research process

The actual research process started with an initial literature review that aimed at exploring literature related to B2B sales, applying AI in business context as well as utilizing AI in B2B sales. The reviewed literature guided drafting the interview questions and designing the interview structure, which were slightly iterated and adapted to individual interviews throughout the research process. A more precise case sampling was performed to find suitable sales organizations as well as sales technology providers to be interviewed on the research topic. More detailed case company selection criteria and data collection methods are addressed in section 3.3.

The interviews were conducted in tandem with ongoing literature research during November and December 2020. The interviews were transcribed, and light analysis was performed after each interview to find interesting and recurring themes that guided ongoing literature review as well as rest of the interviews. For example, concepts such as *black box problem* and *explainable AI* were brought forth in the interviews and literature on such concepts was searched afterwards. The research was redirected and rescoped multiple times based on the gathered information and the research questions were iterated in dialogue with empirical findings (Eriksson & Kovalainen, 2008).

Once all the interviews had been conducted, final more in-depth analysis of the interviews was performed, and the results of the thesis were written. The data analysis methods used in the study are discussed in more detail in section 3.4. The literature review was also polished and finalized based on the final results of the empirical research. Finally, the results were compared with the existing literature and the discussion section was written.

3.2 Method of literature review

As the research utilized the systematic combining method (Dubois & Gadde, 2002), literature research was done simultaneously with empirical research and they were not separate phases of the research process. Therefore, relevant academic literature was reviewed before, during and after conducting empirical data collection through interviews in an iterative manner according to evolving framework approach (Dubois & Gadde, 2002), which allowed the study to be exploratory. This section elaborates how the abductive research approach impacted the literature review.

The literature review of the study was conducted in three distinct stages during the research process. Firstly, an initial literature review was performed as a part of research

planning before the actual research process started. The initial literature review aimed at finding a framework that could work as a lens for examining how AI could contribute to B2B sales as well as finding literature that could direct the scope of the study. Secondly, once the empirical research of the study started, topics emerging from the interviews guided the ongoing literature search. The validity and sufficiency of the current literature review was iteratively assessed based on empirical insights and further literature search was performed accordingly. Lastly, the literature review was polished and finalized once all the interviews had been conducted and the empirical results of the study had been obtained. This final assessment of the literature review also guided writing the discussion section of the study.

The literature research process of the study is demonstrated in Figure 5. The goal of the literature research was to find relevant academic literature with respect to sales and artificial intelligence research as well as literature related to applying AI in B2B sales or other similar customer-facing business functions. The reviewed literature under these three main categories established the theoretical background for examining the broad and novel research topic in question and the discussed topics were used as the foundation for the empirical research of the study.

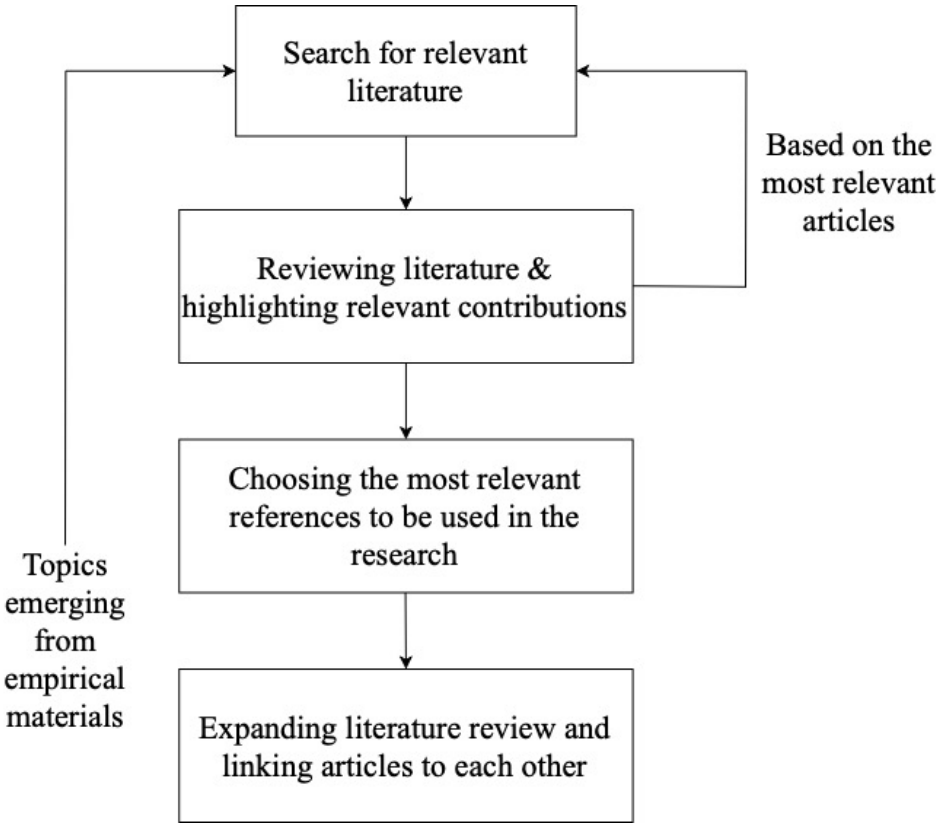

Figure 5: Literature research process

The first phase of the literature research process focused on finding relevant literature from databases such as SpringerLink, Emerald, ProQuest, EBSCOhost as well as Google Scholar. A big portion of the relevant literature related to AI and its implementation had been written during the last few years, which brought forth the novelty of the research area. Due to this, some non-peer-reviewed articles published in business magazines were used as references, while peer-reviewed articles of academic journals were used as the primary source of information in order to ensure the academic rigor of the study. Once the empirical research started, topics discussed in the interviews of the study guided the literature search in an ongoing manner.

The second phase of the literature review involved reviewing the found relevant articles and highlighting the most relevant contributions of them. The reference lists of the most relevant articles as well as their 'cited by' sections were used as a way to find other similar and relevant articles. Furthermore, contributions and discussions of different articles were compared in the third phase and the most relevant articles used to build the theoretical background of the study were selected. Lastly, the literature review was written and expanded over time based on linking and grouping the selected articles with each other to create cohesion for the theoretical part of the study.

3.3 Data collection

The research data was collected primarily with semi-structured interviews and secondarily from company websites and online articles. Online sources were utilized to complement interview data on matters that were publicly available information, such as product features. Interviews were performed in semi-structured format as they allowed to study both what and how questions as well as vary the phrasing and order of the questions in the interviews (Eriksson & Kovalainen, 2008). Especially in the interviews with sales technology providers, the questions were slightly altered depending on the interviewed company's context. Also, when theoretical saturation was achieved with certain topics in the interviews, the focus shifted to less addressed topics. Asking open-ended questions was essential for obtaining the results of this study as they allowed occasional open dialogue between the interviewee and the researcher when particularly interesting themes were brought forth in the interviews. The interview frameworks for both interviewee groups were created in the early phase of the research process and can be found in Appendix A and Appendix B.

The data collection process started with contacting potential interviewees via email and LinkedIn with an interview request to participate in the study. The background of the research was briefly introduced to them, and their consent was confirmed upon agreeing to schedule an interview. Moreover, the initial list of interview questions was sent to the participants before the interviews. In the beginning of the interviews, each participant was asked if the interview could be recorded for transcribing purposes and if their name could be mentioned in the context of the research. Each interviewee's response was affirmative as long as they would be able to review the results of the study and suggest alterations before publishing. The main motivation for the participation of the interviewees was their own genuine interest towards the topic which was highlighted multiple times in the interviews.

During November and December 2020, 20 individuals representing 17 different organization participated in the interviews of the study and in total, 7 sales organizations and 11 sales technology providers were interviewed. Two people from organizations of Salesforce, Microsoft and Hubspot participated in the interviews as the first person was interviewed from the viewpoint of their own sales organization and the second from the viewpoint of being a sales technology provider. In addition, Paul Roetzer from Marketing AI Institute participated in the interview with Drift and apart from this interview, the interviews were conducted one on one with only the interviewee and the interviewer present. Also, Pekka Töytäri, Professor of Practice at Aalto University, was interviewed for general guidance at the beginning of the research process. The interviews with sales organizations were conducted before most of the interviews with sales technology providers, which aided the research process by providing more context for discussing utilization of AI in B2B sales with the technology providers.

Half of the interviews were conducted in Finnish language while the other half in English and the interviews with Finnish participants were translated by the researcher. On average, the interviews lasted approximately 50 minutes. All of the interviews were conducted remotely through Google Meet due to different geographical locations of the interviewees as well as the ongoing Covid-19 situation and the Finnish government's instructions to refrain from physical meetings. Conducting the interviews online did not compromise the quality of the interviews or the results of the study.

3.3.1 Interviewed sales organizations

During the planning phase of the research, the scope of potential case sales organizations was narrowed down to B2B software provider companies. This choice was made based on two assumptions: (1) selling software solutions covers all the sales stages and activities related to complex B2B solution selling described by the value-based selling framework and (2) software technology providers are likely to be more tech-savvy and more prone to utilize sales technology as well as digital channels to support their sales processes. Similar case sampling reasoning had been used in a recent study on digitalization of B2B sales processes (Rodríguez et al., 2020).

Seven sales organizations of B2B software companies were interviewed in this study and they are presented in Table 1. All of the interviewed companies had a software product/service offering portfolio that enabled them to offer varying solutions depending on singular customers' needs. Therefore, their sales processes were often complex although few interviewees' offering was partially fairly standardized and customers could also deploy these solutions independently. Moreover, four of the interviewed sales organizations were also sales technology providers and were therefore assumed to have more insights into utilization of sales technology in B2B sales. Six out of seven of the interviewees were Finnish due to easier access to interviewees and four of them represented Finnish companies.

Table 1: Interviewed sales organizations of B2B software companies

Name	Role	Company	Turnover (€)	Employee count
Janne Sipilä	Sales Director	Microsoft	Over 100 billion	>100 000
Toni Korppi	Director of General Business	Salesforce	10-100 billion	20 000 - 50 000
Keith Lally	Channel Account Manager	HubSpot	500-1000 million	2000-5000
Onni Piiparinen	Director of Sales Operations	Relex Solutions	50-100 million	500-1000
Tuomas Rinkineva	Customer Solutions Engineer	Smartly	50-100 million	200-500
Lauri Heiliö	Country Manager	Vainu	10-20 million	100-200

Markus Nuotto	Vice President of Sales Operations	Aiven	10-20 million	100-200

However, the interviewed companies were fairly heterogenous in terms of size, specific industry and target customer segment. As a result, there were differences in how the sales organizations were structured and how they performed their sales. However, their sales processes followed a sufficiently similar pattern to describe how modern B2B software organizations conduct their sales. Accessing a group of rather homogeneous B2B sales organizations would have been challenging given the time frame of conducting the research and this was not deemed as essential for the validity of the study.

The sales organization cases were selected according to theoretical sampling approach proposed by Eisenhardt (1989) for qualitative case study research and the number of cases was limited to the point where contribution of an extra case would be inconsequential. While it was confirmed with the interviewees that their names could be mentioned in the study, it was agreed that individual sales organization's sales processes and procedures would not be addressed in great detail and the interview data would be aggregated when the results of the study are written as these matters are not publicly available information.

3.3.2 Interviewed sales technology providers

The interviewed sales technology providers could be roughly divided into two groups, CRM system providers and sales technology providers that offer a product for performing or enhancing a distinct stage or activity performed within a B2B sales process. Four CRM providers were interviewed as they are generally more established companies that have a longer history of research and development in the sales technology industry. Moreover, close to every sales organization utilizes a CRM system and modern CRM systems providers aim at supporting sales organizations throughout their sales processes. Therefore, they were expected to have explored various use cases for AI. On the other hand, seven sales technology companies providing software solutions for supporting a certain stage or activity within B2B sales processes were interviewed. These companies were established during the last decade apart from Vendavo and had received funding from venture capital investors. The case sales technology provider companies are presented in Table 2.

Table 2: Interviewed sales technology providers

Name	Role	Company	Description
Tomas Rytkölä	Senior Manager of Solution Engineering	Salesforce	Salesforce is a global cloud computing company that develops CRM solutions and provides business software on a subscription basis.
MK Getler	Head of Marketing	Alyce	Alyce is an AI-powered platform that works as a door-opener or to continue to develop real sales relationships.
Ian Leaman	Product Manager of AI Products	Hubspot	HubSpot develops cloud-based, inbound marketing software that allows businesses to transform the way that they market online.
Tarmo Tali	Vice President of Engineering	Pipedrive	Pipedrive is the first CRM platform developed from the salesperson's point-of-view.
Alex Hoff	Senior Vice President of Product Management	Vendavo	Vendavo develops enterprise price management and optimization software solutions for B2B companies in various sectors.
Axel Paimio	Product Marketing Manager	Microsoft (Dynamics)	Microsoft Dynamics develops customer relationship management, enterprise resource planning, and business solutions software.
Vijay Jegan	Senior Vice President of Engineering & CTO	Tact.ai	Tact.ai is a human-friendly CRM company. It's on a mission to make enterprise software more human-friendly using AI.
Herkko Kiljunen	Chief Technology Officer	Leadfeeder	Leadfeeder is a sales lead generation tool for B2B companies, helping convert promising visitors into sales leads.

Pavel Dmitriev	Vice President of Data Science	Outreach	Outreach is a sales engagement platform that accelerates revenue growth by optimizing interactions throughout the customer lifecycle.
Mark Kilens	Vice President of Content and Community	Drift	Drift is the Revenue Acceleration platform that uses Conversational Marketing and Conversational Sales to help companies grow revenue and increase customer lifetime value.
Vincent Lo	Vice President of Product Marketing	Klue	B2B SaaS providing market and competitive intelligence to help sales, and the teams that enable them, leverage competitive intelligence to win more business.

The case sampling approach was quite different for the sales technology providers. At first, an internet search was made on companies developing AI-powered sales technologies and a list of potential case companies was created. Major CRM providers were recognized to be more established as well as widely known companies and considerable case companies for the research. The other companies were selected to represent different use cases of AI in the context of B2B sales and the main criterion was to find case companies that were distinct from each other. For example, there are multiple sales technology providers offering conversational AI products, but digging deeper into this kind of singular use case was not the aim of the study. Furthermore, the amount of gathered venture capital funding by the companies was used as an evaluation criterion in case sampling.

The aim was to interview sales technology providers that provided distinct AI-enabled solutions for B2B sales in order to gain a more holistic understanding of different use cases of AI throughout a B2B sales process. Although common themes were expected to arise during the interviews, the main goal of the interviews with sales technology providers was to find varying use cases of AI in B2B sales. Thus, theoretical saturation was not a goal with this interviewee group of sales technology providers, nor it would have been viable.

3.4 Data analysis

Data analysis was performed simultaneously alongside with further data collection and literature research in line with systematic combining method (Dubois & Gadde, 2002). The interviews were transcribed, and a light analysis which highlighted noteworthy statements was performed after each interview in order to guide the following interviews to address recurring themes in more detail. As Eriksson & Kovalainen (2008) put it, data collection and data analysis are seldom separable from each other and such was the case with this research as well. Likewise, initial literature review was assessed when new topics and themes were brought forth in the interviews, as going back and forth between theory and empirical findings is an essential part of utilizing systematic combining as a research approach (Dubois & Gadde, 2002).

Once all the interviews had been conducted, a final analysis was performed in a more detailed manner compared to the light analyses between the interviews. At first, within-case analysis was performed to examine each case separately which was followed by a cross-case analysis to find common themes and differences between the cases (Eriksson & Kovalainen, 2008). All the interview transcriptions were read through multiple times in order to find and code statements that were relevant and noteworthy to the research questions. The interviews and respective transcriptions generated nearly 200 pages of raw textual data and a systematic coding system was required to make sense of the vast amount of data. All empirical data was organized into a case record (Eriksson & Kovalainen, 2008).

The interviews were primarily analysed and coded based on a pre-formulated theoretical proposition, value-based selling, with the aim to link statements of the interviewees to distinct stages of a sales process described by the theory (Töytäri, 2018). However, the coding system was also developed further based on interpretation of the collected empirical data. For example, the statements formed noteworthy entireties such as challenges of implementing AI in B2B sales, which were not related to existing value-based selling literature and thus, not theory guided. (Eriksson & Kovalainen, 2008)

As a result, the coding system used to analyse the empirical data emerged and it is presented in Figure 6. The sales activities and respective AI use cases discussed in the interviews were linked to different stages of B2B sales process described by the value-based selling framework. Furthermore, customer success was identified as a group of activities occurring after a sales case had been closed, which is outside the scope of the

current value-based selling theory. In addition, sales activities and AI use cases occurring throughout a sales process were brought forth in the interviews and are categorized as an own entity. Also, activities and respective AI use cases related sales management were recognized and addressed in the results of the study. These themes formed the aggregate dimension of different B2B sales activities and respective use cases of AI which are presented in section 4.1. The described use cases of AI were also inherently related to the aggregate dimension of opportunities of utilizing AI in B2B sales presented in section 4.2.

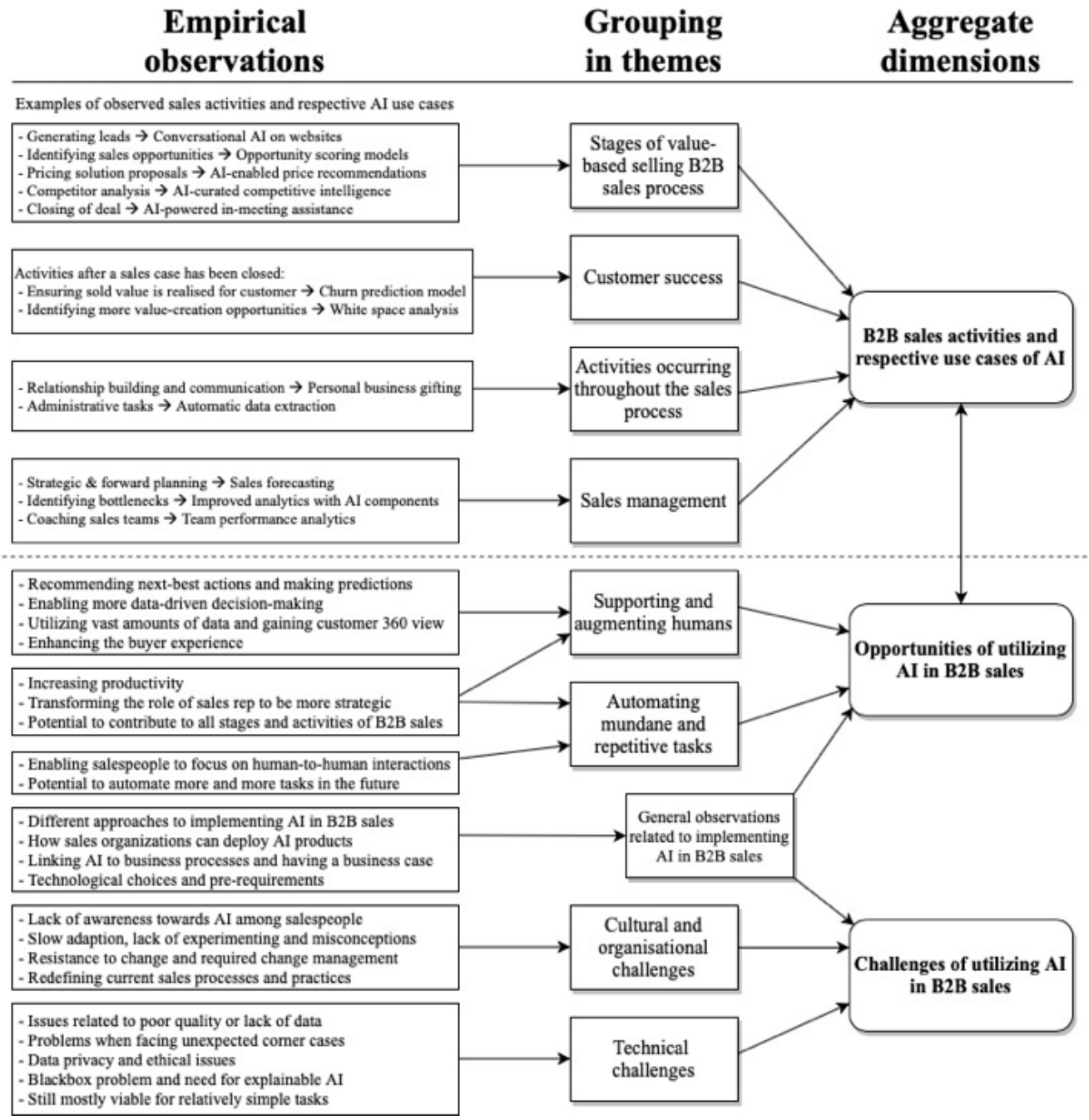

Figure 6: Data structure and coding system

Moreover, this research also aimed at painting the bigger picture of utilizing AI in B2B sales and groups of relevant statements in addition to the operational level of sales and AI use cases emerged in the interviews. These statements were not attachable to value-based selling theory and were first coded in three main categories: positive, neutral and negative statements related to utilizing AI in B2B sales. The positive statements formed two main groups of themes related to potential benefits of AI and were aggregated into opportunities of utilizing AI in B2B sales and presented in section 4.2. On the other hand, the negative statements formed groups of themes related to different challenges of utilizing AI in B2B sales and the aggregate dimension challenges of utilizing AI in B2B sales is presented in section 4.3. The interviewees also mentioned many neutral statements that could not be categorized distinctly as a challenge or an opportunity, which were grouped into theme of general observations related to implementing AI in B2B sales. Eventually, these neutral statements were linked to different identified opportunities and challenges in order to provide background for the opportunities or to explain possible solutions to the identified challenges.

4 Results

This chapter presents the findings of the empirical part of the thesis. First, a modern B2B sales process is described by linking empirical observations from interviews with sales organizations to the value-based selling framework. When the sales activities are presented, respective AI use cases are discussed. Second, the higher-level as well as more future-oriented opportunities of AI are addressed. Lastly, the challenges and limitations of utilizing AI in B2B sales are discussed in order to paint a realistic picture of AI implementations in B2B sales.

4.1 Different activities of B2B sales and respective AI use cases

This section presents the different stages and activities of B2B sales based on the interviews with sales organizations and links respective AI use cases brought forth in the interviews with technology providers to the B2B sales process. The interviews were analysed and are presented through a renewed version of the value-based selling framework, which is presented below in Figure 7. The renewed framework emerged through analysing the interviews with B2B sales organization as new groups of sales activities were identified. The grey areas in the figure belong to the existing value-based selling framework whereas highlighted blue parts are additions to the existing framework.

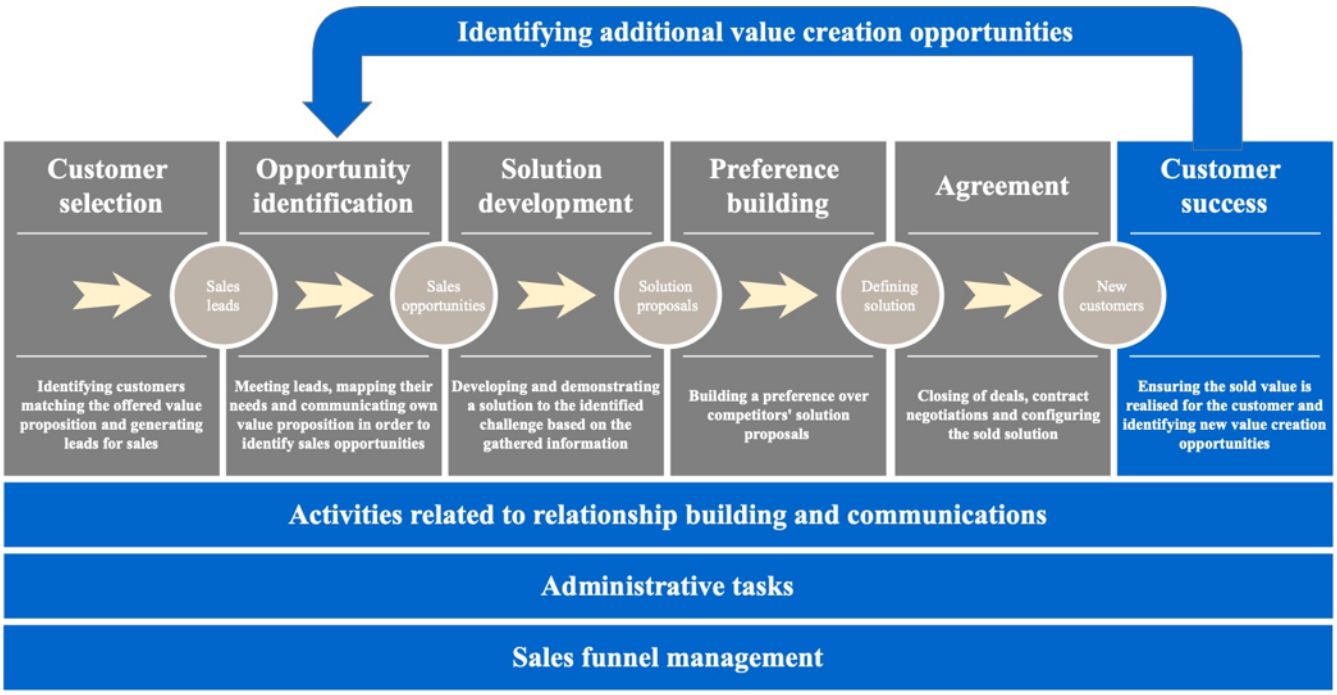

Figure 7: Renewed value-based selling framework

Customer success was added as a new stage at the end of the sales process which aims at identifying additional sales opportunities within existing customerships. In these cases, the sales process starts directly from the opportunity identification stage. Additionally, sales representatives were perceived to perform two groups of activities throughout a singular sales process: relationship building and communication activities as well as administrative tasks. Lastly, sales funnel management oversees the whole process and is the managerial aspect of B2B sales.

4.1.1 Customer selection

In practice, customer selection stage is the process of prospecting and identifying leads that sales representatives can start targeting with different sales activities. All the interviewed sales organizations had a clear view of their ideal customer profile that aligns with the value proposition they are providing. Customer selection was deemed as an important activity at the very beginning of the sales funnel in order to ensure that resources are spent to sales leads and opportunities worth pursuing. It was brought forth multiple times in the interviews that AI is likely to have the biggest impact on the very early stages of B2B sales processes because prospecting is a natural fit for utilizing AI as these activities are fairly homogeneous and high volume, which enables examining and optimizing sales activities at an aggregate level based on data.

> *"I don't know in how many years but at some point, first time sales reps need to get involved is when they start talking to the prospect. Everything prior to that is automated."*
>
> *- Pavel Dmitriev, Vice President of Data Science at Outreach*

Market research was highlighted as a part of the customer selection process and it aims, for instance, exploring what are the most lucrative geographical markets and industries within those markets. Generally, the target accounts were selected based on size, industry and segment. One of the interviewed sales organizations highlighted that they have made account scoring of their whole potential market and the highest scoring companies form their named accounts which are then prioritized in sales. Respective highlighted AI use case was that a list of target accounts could be given to AI, after which it can identify and recommend other similar companies worth contacting.

However, the interviewed sales organizations were established enough to have a solid existing customer base which had given them a clear indication of what kind of prospects they should approach based on previous successes within a certain industry. They have had success stories in particular segments and industries which guided their customer selection to identify more similar companies in the market. Having historical data of sales leads also enables another AI use case, predictive lead scoring, which analyses historical customer and sales data in a CRM system and estimates how likely different sales leads are going to buy. This feature, offered by CRM providers such as Salesforce and Microsoft, enables sales organizations to estimate whether some leads are warm or unsuitable for them and as a result, sales representatives can spend their efforts on the most potential sales leads. In addition, Pipedrive had developed an AI-powered conversion prediction application that is able to assess within 24 hours whether a company is going to convert into a customer after registering on their website, which is a useful AI use case in the software industry.

> *Translated: "There is predictive lead scoring, a machine learning model that processes data, in this case sales leads, and gives scores for the leads. It tells whether a lead is warm or unsuitable for a sales organization. As a result, the sales organization can focus on leads which are more likely to convert into customers according to the AI."*
>
> *- Tomas Rytkölä, Senior Manager of Solution Engineering at Salesforce*

Furthermore, prospecting and lead generation often involve contacting and sending emails to potential customers in order to qualify them, which was highlighted as one of the most time-consuming activities in B2B sales. Booking meetings with prospective customers through cold contacting is still an important sales activity, in which AI can fortunately support sales representatives. For example, Outreach has developed a machine learning model that can automatically classify email replies from prospects into several different categories such as positive reply, objection, referral or unsubscribe. Furthermore, the model is able to detect different types of objections such as already having a solution in place from a competitor. This kind of sentiment analysis allows sales representatives to quickly assess how they should react to their prospects' replies which can enhance their performance. NLP-based analysis can give better metrics for optimizing sales content compared to traditional measuring of clicks, opens or replies. Moreover, this allows

examining sales representatives' performance by looking into e.g., which sales representatives are good or bad at overturning objections, which is in the interest of sales leaders.

> *"...and thanks to prospecting being a very specific use case, we can cover 90% of all replies by four top level categories: positive reply, objection, referral and unsubscribe. And underneath there is taxonomy of 14 different types, for example, this is financial objection that is about money."*
>
> *- Pavel Dmitriev, Vice President of Data Science at Outreach*

Nevertheless, it was emphasized in all the interviews with sales organizations that customer selection, prospecting and lead generation, is not merely sales function's responsibility. Although most of the interviewed sales organizations also did traditional cold outreach to prospective customers, they also relied on e.g. marketing, digital channels, industry events or partner network in customer selection. In fact, it was brought forth that the first touchpoint with a prospective client often occurs through activities performed by marketing instead of sales. While marketing technology providers were not interviewed in this study, the interviewed sales leaders often brought forth that it is probably easier to utilize AI in marketing automation than during the B2B sales processes, due to bigger amount of fairly homogeneous repetitions and more available data.

> *Translated: "Marketing automation in B2B business can reduce the need for humans doing cold outreach, which takes a lot of time and is not the best way to gain high-quality leads."*
>
> *- Tuomas Rinkineva, Customer Solutions Engineer at Smartly*

Online channels were also emphasized as essential source for generating sales leads. For example, when a potential customer downloads certain digital content from the seller's website, a sales development representative could contact the person within an hour in order to continue the discussion with a personified message according to the previously downloaded content. One use case of AI related to online channels is generating sales leads by monitoring what companies are visiting the selling organization's website. Leadfeeder, a Finnish startup company, offers a software product that enables companies to see what other companies are visiting their websites, which is a useful signal of buying interest.

Leadfeeder's product utilizes machine learning models in the background in order to identify the website visitors by combining information from multiple databases. Simply tracking website visitors does not require AI per se, but company identification databases are complex and require combining multiple data sources and therefore, machine learning models are beneficial for detecting whether the website visitor signals are actually relevant. This is a great example of an AI use case that is not clearly visible to the end-user while it improves the product functionality significantly in the background.

> *Translated: "Many sales teams are traditional, and they do cold calls and marketing, but they do not utilize relevant signals... ...the companies that visit a website come there with a buying interest, they're not just surfing the internet. Highlighting these signals helps to target sales activities."*
> *- Herkko Kiljunen, Chief Technology Officer at Leadfeeder*

Furthermore, it was addressed that often times customers approach the seller independently after exploring information on their digital channels which, in a sense, eliminates the customer selection phase from the sales process. Some of the first discussions with prospects can be automated with conversational AI that utilizes natural language processing to engage with people visiting a website. Drift, one of the interviewed sales technology providers, offers such conversational AI for revenue acceleration. Their product is able to answer the questions of website visitors as well as do initial sales qualification at any given time when a buyer decides to interact with the seller. Drift's product can personalize the conversations by tapping into e.g., the seller's CRM system as well as other sales tools and the discussions can furthermore be used to enrich the current CRM sales data. If the conversational AI identifies a concrete buying interest, it can route the qualified lead to an appropriate sales representative and handle booking of the meeting on behalf of the sales representative. This enables sales organizations to handle lead qualification at scale very efficiently while creating a seamless buying experience for their prospects. Furthermore, the sales representative is more prepared for the booked meeting based on the previous discussion between the buyer and conversational AI.

> *"It's about sales qualification to help folks book more qualified meetings with qualified buyers and helping that aspect of the sales process by doing it with a 24/7/365 approach... ...buyers are buying way before they ever talk to a sales*

person. It is using AI to be at the ready to answer those questions and potentially book a meeting, connect an interested buyer with a salesperson."

- Mark Kilens, Vice President of Content & Community at Drift

These above-mentioned matters have significantly altered the role of sales in the customer selection phase of a B2B sales process. While traditionally sales representatives have spent plenty of time on prospecting, creating lists of potential contacts and cold contacting them, this kind of sales approach was not generally viewed as the most optimal way to do sales by the interviewed sales organizations. Furthermore, it was commonly highlighted by the interviewed sales leaders that prospecting is one of the most time-consuming activities of B2B sales, downright bottleneck according to some. It can be more efficient to bring in the experienced B2B sales professionals when a prospect has already been identified as a warm lead and in this case, sales professionals can focus their time and resources on co-creating value in interactions with the potential customer.

Based on the interviews, online channels will play a growingly bigger role in supporting B2B sales and AI has great potential in enhancing or even automating the customer selection stage of a B2B sales process. As a result, sales professionals could spend their time on the more high-value work in the following stages of the sales process and many sales processes would begin directly at the opportunity identification stage. For example, when a sales lead engages with the selling organization's digital channels and approaches the seller independently, the seller can jump straight to more detailed discussions in order to identify a sales opportunity.

"Due to Covid-19, 2020 is the year of website. It has highlighted how important website is for that digital journey. We've seen customers accelerating their digital plans, at why they've been thinking do they need digital transformation, but now they have to, there's no other options but to do it."

- Keith Lally, Channel Partner Manager at HubSpot

4.1.2 Opportunity identification

Once a potential sales lead has been generated through sales, marketing or online channels, all the interviewed sales organizations were doing similar activities during the opportunity identification stage of the sales process. When the initial interest has been evoked in a sales

lead, sales representatives aim at having a meeting with the lead as soon as possible to validate whether the prospective customer has actual needs and if there exists a concrete sales opportunity. These situations require human-to-human interaction as well as understanding particular sales context and cannot be automated per se, according to the interviewed sales organizations, which makes opportunity identification a hard area for utilizing AI. When the sales process progresses towards first discussions with a lead and eventually developing a solution to their individual needs, the process becomes more complex as every deal is slightly different and requires customization and therefore, there is less room for utilizing AI.

> *Translated: "Does AI recommend the right actions to take at every stage of the sales funnel with a better accuracy compared to humans? Does AI recommend what to do or present in contract negotiations? Not right away. The answer is that AI tools require tested models and lots of data, and many implementations are not there yet."*
>
> *- Toni Korppi, Director of General Business at Salesforce*

The criteria for moving a prospect from a sales lead to a sales opportunity varied between the organizations and this could happen after a single meeting or require multiple meetings depending on the complexity of the sales case. The agenda of the meetings can fluctuate, but generally the aim is to present own company's offering and gain basic understanding of the lead's business challenges. It was also perceived as essential to investigate whether the lead has necessary budget to buy and who are the key decision-makers for the deal to move forward. BANT (budget, authority, need, timeline) was brought forth as a useful criteria method for qualifying a sales opportunity. It was pointed out that mapping these very basic requirements is essential very early on in the first sales discussions, because it would guide the rest of the sales process and help sales representatives focus on sales opportunities worth pursuing. AI-enabled in-meeting assistant can support sales representatives during the first prospecting meetings, but it is more useful for closing the sale and is elaborated in section 4.1.5 on agreement stage of the sales process.

A sales lead could be occasionally qualified as a sales opportunity after the first meeting in some more simple sales cases, but more complex sales cases continue with detailed discussions where the seller aims at doing business discovery to identify what kind

of value could be created for the sales lead. Business discovery dives deeper into the needs and requirements of the lead, addresses their specific business challenges and goals as well as aims at identifying how the seller's offering could create value for the lead. It was noted that very technical details could be mapped during these conversations to guide tailoring and offering a customized solution to the sales lead in the next stage of the sales process.

> *Translated: "Once a lead has been qualified, we want to do a business discovery with the prospect. This is to ensure we have a detailed understanding of the prospect's requirements and challenges, and also to make sure we offer a solution set that will help them get the most value."*
>
> *- Onni Piiparinen, Director of Sales Operations at RELEX Solutions*

While opportunity identification inherently requires plenty of manual work and human-to-human interactions, AI can be utilized in predictive opportunity scoring which evaluates how likely a singular sales opportunity is going to progress, similarly to predictive lead scoring. AI is able to analyse sales organization's past won and lost closed opportunities to build a scoring model within a CRM system and estimate a probability of closing an open sales opportunity. There are different touchpoints occurring during interactions with the prospective customer which creates data related to the sales opportunity that AI is able to analyse and estimate the score. The score given for a sales opportunity can become more accurate over time as the sales opportunity progresses and the amount of gathered data increases. AI examines initial data related to the sales lead and their company, and data points such as their industry and the contact's role at the company or what different touchpoints have occurred with the contact are taken into account when the initial opportunity score is estimated by AI.

> *Translated: "...it can be scored how likely it is to win a sales opportunity. It is based on data; AI is used to crunch the data as there are many touchpoints based on which the scores are calculated... ...it is updated and becomes more accurate when more data about the sales opportunity is collected."*
>
> *- Axel Paimio, Product Marketing Manager at Microsoft*

AI can also be used to recommend certain actions to advance sales opportunities. For example, Salesforce's opportunity insights feature utilizes AI to highlight important

matters from emails related to a sales opportunity which could affect the sales opportunity positively or negatively as well as give follow-up reminders to sales representatives. In this case, AI is kind of a coaching assistant that gives guiding suggestions to a sales representative while the actual decision-making will be left to the sales representative.

4.1.3 Solution development

After qualifying a sales lead as a sales opportunity, each of the interviewed companies continued the sales process with activities to demonstrate own solution's value in solving the prospective customers' specific business challenges. All the information gathered during the opportunity identification stage of the sales process is utilized to develop and communicate a solution proposal that aligns with the solution vision that the potential customer has identified. This stage of the sales process is difficult area for utilizing AI as developing a customized solution for a customer requires human-to-human interaction and plenty of manual work. All the interviewed sales organizations offered multiple different options for customers in terms of products and services and crafting a specific solution to a specific customer need was highlighted in the interviews. One of the interviewees also discussed doing a more detailed audit of the prospective customer's situation in order to point out where the prospective customer could find improvement opportunities and how the seller's solution could aid in achieving these improvements.

> *"When we understand the company and their goals, we can look into how we can support them. We do this with a solution demonstration, after which we can clearly identify how we can support customer's business challenges and then we very much move to the applicable solution."*
>
> *- Keith Lally, Channel Partner Manager at HubSpot*

In the context of B2B software companies, performing a demo was highlighted as a way to engage with the customer and influence their perceptions about the value the seller's solution could provide. This is a more concrete way to demonstrate value and influence the perceptions of a sales lead compared to just presenting slides. Furthermore, it was highlighted that it is important to customize how own offering is presented and how it fits to the sales lead's specific business context. All of the interviewed companies offered

multiple distinct solutions which may require customization and therefore, the value proposition is always iterated in the interactions with a potential customer.

Quantifying the value of proposed solution was also addressed in the interviews. Calculating a business case was highlighted as a way to influence buyers' perceptions as if e.g., a return on investment could be secured to be positive, the sales case was more likely to succeed. Creating a pilot or proof of concept was addressed as a useful way to demonstrate own solution's value in solving the prospective customer's business challenges, especially in sales cases with the largest enterprise clients that potentially have the highest deal value. This was mentioned to also help in convincing the client about the proposed solution's technical viability. A free trial version of the product was also discussed as a way to demonstrate own solution to a prospective customer.

> *Translated: "...we aim at getting to a point where a business case calculation can be made and return on investment, the value for the customer, can be estimated. And then present this to the right person."*
>
> *- Onni Piiparinen, Director of Sales Operations at RELEX Solutions*

Lastly, the solution development stage often involves initial pricing of the proposed solution although the price is negotiated in more detail during the contract and price negotiations at the last stage of the sales process. While developing a solution to customer's individual challenges is a complex part of a B2B sales process which heavily depends on human work, AI could assist sales representatives in choosing a suitable pricing model and price for their solution proposals.

Vendavo's AI-powered pricing B2B software looks into how customers' past transactions have occurred and uses the outcome of these transactions as a dependent variable for modelling customers' willingness to pay. Based on the selling situation, their model uses customer, product and transaction attributes as independent variables for performing multivariate regression and clustering analysis to estimate a price range that a sales representative could propose to the potential customer. It was brought forth in the interview with Vendavo that it is more effective to recommend a possible price range that indicates what could be a modest or an aggressive price instead of suggesting a single number as there are always data issues in B2B setting and there is no single truth for the optimal price.

> *"The main use of AI in our solution is to use a set of algorithms that we have developed over time... ...in that selling situation, we can help identify what customer's willingness to pay is likely to be within a range. So, then we can give the salespeople typically a range that says this would be an aggressive price and then here's a more reliable target and things like that."*
>
> *- Alex Hoff, Senior Vice President of Product Management at Vendavo*

Furthermore, if a company has high-quality win/loss data of their past sales opportunities, AI could estimate the probability of winning a contract at different prices and a salesperson could ultimately make trade-off decisions based on the recommendation. In fact, utilizing AI in pricing is a great example of human-machine collaboration. The main purpose of AI-based pricing recommendations is giving sales professionals data-based insights into how a solution could be priced optimally based on previous similar sales situations, but the final decisions would remain to be made by humans. However, AI-based pricing recommendations are currently available mainly in B2B manufacturing and distribution industries with higher transaction volumes and such AI applications are have not yet emerged for more complex solution sales in the software industry.

> *"...not many people have focused on that (AI-enabled pricing for software products). One of the reasons is that software space has been transitioning from licensing to subscription or even consumption pricing models. So, it's a different problem to solve because the data is quite different."*
>
> *- Alex Hoff, Senior Vice President of Product Management at Vendavo*

4.1.4 Preference building

Usually selling organizations have to build preference over competition during the sales process and the interviewed sales organizations were aiming at doing this in many similar ways. First of all, reference cases were highlighted as an important way to address how the offered solution has previously created value for similar business challenges within the same industry or customer segment. Furthermore, the selling organizations often arrange reference calls between prospective customers and existing customers, as a direct reference from another end-user can be perceived as more convincing compared to a pitch of a sales representative. Two of the interviewees also brought up G2, an independent online review

platform, as a convenient way to present how their offering is evaluated by actual users of the product compared to competitors.

> *Translated: "We have a lot of references, a really satisfied customer base. We can organize calls between customers, they can talk between each other and discuss what has been done and achieved with our tools."*
> *- Tuomas Rinkineva, Customer Solutions Engineer at Smartly*

Most often the customer is comparing a few different alternatives during their buying process and all the interviewed companies had made their market research and were aware of their main competitors as well as how they position their offerings in the competition. This made the sales organizations able to build counterarguments for their competitors' solution visions and address how their own solution proposal, the core value proposition, is different and more valuable compared to the competitors. It was also mentioned that in more complex sales cases, sales teams can get support from their central global organization that can bring in their expertise on specific use cases or industries in order to differentiate from competition with superior knowledge about solving particular business challenges.

> *Translated: "Of course we have a strong understanding of our competitors and we know how they position themselves. We do ensure we have a clear understanding of what our unique value proposition against the competition is for each case, and make sure we emphasise that during the sales cycle."*
> *- Onni Piiparinen, Director of Sales Operations at RELEX Solutions*

Conducting market and competitor research in order to build customer preference over competitors effectively requires collecting data about competition as well as extracting insights from the collected raw data into actionable intelligence that sales representatives can actually use and this can be supported with AI. Klue has developed competitive intelligence software that leverages AI throughout the collection, curation and delivery/consumption phases of competitive and market intelligence. This helps competitive intelligence professionals more efficiently enable sales representatives to be more effective in sales negotiations and improve sales performance. The AI in their platform helps companies automatically track their competitors' across the public web and

internal sources, identify and tag competitor entities out of the mass of raw data, analyze and score the content and its context, and curate the most important and relevant insights into a centralized competitive intelligence repository. As noted in the interview with Klue, there are hundreds and thousands of relevant information data points about competitors publicly available on the internet but the challenge is turning that mass of data into actionable information. Furthermore, these external data sources need to be combined with sales organization's internal knowledge and data sources to create competitive intelligence that wins business.

> *"Our philosophy is to help clients combine the best insights from the public web with everything that the internal teams and systems already know, into digestible and snackable insights, and deliver them intelligently to the edges of the organization where they can be consumed and leveraged to beat the competition."*
>
> *- Vincent Lo, Vice President of Product Marketing at Klue*

Klue utilizes AI models to interpret the context of information captured and its sources in order to highlight the most relevant competitive insights as well as filter out irrelevant information, which reduces the amount of manual work related to gathering competitive intelligence. AI can e.g., detect duplicates of competitors' press releases and assess relevance of a particular article in the context of an industry so that the competitive intelligence professional can spend more time on the high-value work of creating competitive content for sales representatives to use. AI is also used to improve search functionality in order to help sales representatives find the most relevant information for their particular sales situation. Utilizing AI happens in the background of the product in order to enable the end-users, sales representatives, to more efficiently access highly targeted sales battlecards and actionable insights for handling objections and supersede competitors during sales negotiations.

> *"...taking all of that raw intelligence, extracting insights and creating actionable insights that customer facing people can actually use... ...and then more importantly, provide a particular talk track, a tactic or even content that could be sent to a prospect."*
>
> *- Vincent Lo, Vice President of Product Marketing at Klue*

4.1.5 Agreement

During the sales process, the seller aims at developing a solution to the buyer's business challenges and eventually delivers an offer that addresses the offered solution and its pricing. When the buyer approves the offered solution and decides to engage in a business relationship with the seller, the exact value constellation and value sharing must be jointly agreed upon and this happens during the pricing and contract negotiations. It was addressed that depending on the complexity and magnitude of the sales case, the buyer and seller may negotiate about the pricing of the offered solution in great detail. This requires the seller to efficiently convince the buyer and tie the pricing to the created value. As described in section 4.1.3. on solution development, AI-enabled pricing can be utilized in price negotiations at the very end of a sales process. This use case of AI was not applicable in the context of complex software solutions, but few of the interviewed sales organizations utilized software configurators with pricing rules that automated the pricing decisions on behalf of sales representatives.

> *Translated: "We have a couple of tools, for example a pricing tool that is integrated into our Salesforce CRM. The same tool is also able to make contracts... ...when the tools were implemented, the reaction was only positive. It is an example of how technology has taken us forward, automated the process and relieved our salespeople's lives."*
>
> *- Onni Piiparinen, Director of Sales Operations at RELEX Solutions*

Contract negotiations can require significant efforts and time from the selling organization, and this was recognized occasionally to be one of the most time-consuming parts of the sales process according to one of the interviewed sales organizations. The longer the sales cycle of a particular offered solution is, the more interactions could occur during the negotiation stage of the sales process. This may require dozens of sales meetings and calls depending on the buyer's specific needs. The selling organization aims at providing all the required material to support and influence the buyer's final decision-making and defend the buyer's objections successfully. Also, certain legal matters are often addressed during the negotiations. However, once all the required details about the contract have been negotiated and agreed upon, the contract itself can be created fairly conveniently with software technology.

Recent development of AI has also enabled a new use case that can be beneficial during remote meetings with potential customers towards the end of a sales process, which is becoming increasingly useful as salespeople have been working remotely due to Covid-19 pandemic. Outreach's recently launched product Kaia utilizes AI to support sales representatives with in-meeting assistance when they are aiming at closing sales opportunities via Zoom online conferencing. When a sales representative is in a meeting and someone asks a question about the seller's offering or competitor's pricing, Kaia is able to pull up the right information for the sales representative in real-time. This enables sales representatives to be more effective in overcoming any last objections the potential customers could have and increase the likelihood of winning the sales case.

> *"In-meeting assistance, this applies to prospecting as well of course, but it's much more important for closing. This includes automatically tracking whether important topics were discussed, flagging to the sales rep that they did not cover something, that they are talking too much or asking too few questions and tracking sentiment of different participants and flagging that to the rep etcetera."*
> *- Pavel Dmitriev, Vice President of Data Science at Outreach*

It was brought forth in the interview with Outreach that while prospecting has been the sales activity to which AI has contributed the most, closing a deal involves similar repetitive patterns and therefore, it is suitable context for applying AI. Outreach is also developing a deal state feature for capturing all the people and their activities related to a deal as well as conflating entities such as prospects to give sales representatives a more comprehensive view of the individual deal and the stakeholders they are working with. Doing this requires AI as the same person from the buyer's organization could be involved in multiple deals and AI can recognize to which deal certain activities belong to. Furthermore, the deal state information can be analysed by AI to evaluate deals, whether they are progressing well or not, as well as predict when the deal is going to close.

> *"I actually see a lot of potential in closing as well... ...it's not going to be the same tools and techniques used in prospecting, because it is going to be more personalised and more low volume. But there are going to be processes similar to sequences or actions of prospecting. There are also milestones and steps that need*

to be taken to reach those milestones. Then there are more effective and less effective approaches to perform those actions."

- Pavel Dmitriev, Vice President of Data Science at Outreach

During the end of the sales process, the sold offering must be configured in detail to fit the customer's particular needs. The contract made between the buyer and seller specifies the exact roles, capabilities and resources that are required to implement the solution. This is where sales representatives require more technical support to customize the solution to the buyer's specific needs in the context of non-standardized software solutions. When everything has been agreed upon and the buyer is committed to implementing the solution, the responsibilities tend to shift from sales function to customer success function that is responsible for onboarding the customer and starting to implement the solution. Customer success teams are responsible for realizing the value of the offered solution in the long run to ensure customer satisfaction.

4.1.6 Customer success

While the value-based selling framework does not address the next steps after closing the sale, often referred as customer success or account management activities, they should not be neglected when modern B2B sales are examined. When the interviewed sales organizations were asked to describe their sales process, they always mentioned how sales processes differ between new customers and existing customers. Furthermore, they also brought forth activities that occur after the sales case is closed and contracts have been made. Therefore, B2B sales is a rather iterative process after the first sales agreement has been made and all the interviewed companies saw great potential in cross-selling and upselling. What was common for the interviewed sales organizations was that they all offered multiple services and solutions with the potential to utilize "land and expand" strategy in their sales.

Translated: "For customer relationship management we have two processes. There's renewal process that ensures that sold value is realized for the customer and then we have a sales process for our existing clients. We sell pretty much to our existing customers, there's this land and expand strategy."

- Lauri Heiliö, Country Manager at Vainu

When the selling organization is actively and continuously engaging with their customers after the first sale has been made, they get a better inside view of their customer's organization and this helps to identify new sales opportunities and potential for additional value creation. In these cases, new sales process actually starts directly from the opportunity identification stage of the sales process. While some customers may continue utilizing the sold solution relatively independently, other customers may want to have roadmap discussions about new product features as well as their changing business needs and how the supplier could help with new identified challenges. In this situation, the selling organization can proactively address the current situation of the customer and suggest how additional products or services could create value for them.

> *Translated: "Account management is about being continually in touch and asking if everything is okay or if there are new needs... ...we aim at proactively saying: 'hey, you have this and that product and, in this situation, it would work well if you used this product as well'."*
>
> *- Markus Nuotto, Vice President of Sales Operations at Aiven.*

There are different processes for handling customer interactions after closing the deal, but all interviewed sales organizations had a distinct team or employee who is responsible for customer success and realization of value in the formed customer relationship. In fact, the states of existing customerships are often reviewed on a cyclic basis and further account plans are made based on the identified potential growth areas, in which AI can also support humans. Microsoft has developed AI-powered relationship analytics feature that analyses the state of customerships within a CRM system, scores the relationships and alerts if a customership is moving to a better or worse direction. Furthermore, AI can be used to analyse whitespace within existing customer relationships to identify new sales opportunities. Salesforce's Einstein Analytics product has such feature which enables sales organizations with large product portfolios to identify cross-sell and upsell opportunities.

> *Translated: "There's this feature called relationships analytics, which helps salespeople to focus on the right customers based on signals coming into CRM. It goes through emails and customer data and tells whether this customer relationship is going in a better or worse direction."*

- Axel Paimio, Product Marketing Manager at Microsoft

On the other hand, sometimes existing customers are about to churn, and it is customer success managers' responsibility to prevent this and improve customer retention. AI can be utilized in churn prediction models, which estimate an individual customer's likelihood to churn based on their purchasing history and purchasing patterns or usage of supplier's products. Past transaction history is advantageous for churn prediction when it comes to fairly commoditized products with repetitive purchasing pattern whereas software product providers can track how their users behave and evaluate their churn risk based on that. These applications enable customer success teams to proactively prevent the customer from churning by solving their current issues and helping them to gain most value with the offering they have bought.

"...this is what the purchase pattern looks like. And if I suddenly see a change in that then the AI, which gets run periodically, it picks up on a deviation, basically a variation. And then we use some natural language generation to turn that into an alert for the salesperson."

- Alex Hoff, Senior Vice President of Product Management at Vendavo

The bigger the selling organization's product/service portfolio is the more important the customer success activities are. Furthermore, the largest interviewed companies practically already had all the large enterprises in their customer base, which implied that their sales processes basically start directly from opportunity identification within existing customer relationships. Customers tend to aim at fulfilling their most current and critical needs, and at first, they are mainly interested about supplier's ability to solve these particular business challenges. At this point, they might not be aware of all the supplier's capabilities and it is the selling organization's responsibility to over time help their customers identify additional improvement opportunities and demonstrate how their offering can support their customers with other emerging business challenges. Therefore, customer success should not be neglected as a separate thing apart from sales, but as sales' support function that ensures growth of the existing customerships in the long run.

4.1.7 Activities occurring throughout the sales process

It was also commonly brought forth that salespeople also perform plenty of activities that do not belong to a distinct stage of the sales process. These activities could be categorized into communication and relationship building activities as well as administrative tasks. The interviewed sales leaders discussed that the interactions with customers during the sales processes aim at communicating their value proposition and building relationships with relevant stakeholders in order to create and advance sales opportunities. These relationship and trust building activities are the part of complex B2B solution sales that inherently require human-to-human interaction and cannot be automated per se.

> *Translated: "After all, human touch is the be-all and end-all in B2B sales... ...sales are going to get more automated in online channels, when it comes to sales of simple products. The role of humans is to provide such value that digital channels are not able to provide."*
> *- Lauri Heiliö, Country Manager at Vainu*

However, couple of AI use cases related to supporting communications and relationship building with prospective customers emerged in the interviews. Alyce is a US-based company that provides an AI-powered personal gifting platform which enables salespeople to send personal gifts to people they want to do business with. Their product utilizes AI to match people with personal business gifts based on data related to the individual person and the company they work for as well as the seller's business goals. Their product crawls the data from public open sources such social media profiles and blog posts, which is a great example of utilizing external and publicly available data to enhance a B2B sales process. This enables sellers to build deeper conversations and relationships at scale as well as show appreciation, whether the receiver of the gift is yet a prospect or an existing client.

> *"Our product can actually enhance the entire customer experience and customer journey. But specifically for sales, our tool helps to facilitate better, deeper conversations with folks you want to do business with. It helps with door openers and it helps with deal acceleration. And of course, it also helps with building trust and loyalty: to say thanks and show appreciation throughout the sales process."*

- MK Getler, Head of Marketing at Alyce

Microsoft also provides AI-powered features on top of their CRM system to enable sales representatives to do more efficient communications with prospects and customers. Their talking points feature analyses exchanged emails with a contact in the CRM system and highlights casual topics to be talked about with the contact. For example, if the person has mentioned in the past that they like downhill skiing, sales representative can bring forth the topic as a casual conversation starter. On the other hand, Microsoft's who knows whom feature is able to tell sales representatives who from their sales organization has been in touch with a contact earlier. This kind of network information allows the sales representative to have a preparing session with the right colleague before having a meeting with the contact.

Translated: "It can highlight talking points, that can be used as icebreakers when starting conversations. If the customer has spoken about something like this, then it is good to go along with this kind of familiar style."
- Axel Paimio, Product Marketing Manager at Microsoft

Furthermore, all the interviewed sales organizations utilized a CRM system, and their employees were required to input certain data points about their sales cases to the CRM system. In practice, these activities aim at turning individual salesperson's tacit knowledge into organizational knowledge that the whole sales organization can utilize. It was highlighted that a significant portion of sales professionals' time is spent on repetitive administrative tasks, inputting data manually, that directly increase non-selling time, and this is not usually pleasant work for the sales professionals. While the importance of having reliable sales data was perceived to be essential for sales leaders' work, the sales representatives might not perceive the administrative tasks to be meaningful for their job. This was pointed out as one of the biggest challenges with implementing and utilizing sales technology in general. In fact, it was mentioned by few of the interviewed sales leaders that work related to updating deal details to a CRM system can be one of the most repetitive and time-consuming matters in sales representative's work.

Translated: "It is really important to have accurate data and numbers, because sales leaders evaluate where the business is going based on the numbers. For

enabling that, there is plenty of manual work related to running the CRM process. Recording and maintaining customer engagements in the CRM, updating new information on how sales cases are progressing and moving them to the next stage of the process."

- Janne Sipilä, Sales Director at Microsoft

Nevertheless, this is where AI can come to help. Many AI applications are not clearly visible to the end-user and work under the hood of sales technology products by enhancing the ease of use and productivity with these products. For example, HubSpot's CRM system is powered by many AI models that make its use more convenient for the end-users. When a user imports a CSV into their CRM system, it can automatically map the headers to the right properties or when a sales representative receives an email from a new sender, the system can automatically scan the email's properties and it can be conveniently added as a new contact to the CRM system. Furthermore, HubSpot's business card scanner enables taking picture of a business card after which the contact details are automatically inputted to the CRM.

"Data entry is a huge problem, I think. That's been my focus for the last little while, because if you don't get the data into the CRM system in an easy way, that's not going to get adopted. Reports are not going work, people are going to feel harassed by their managers because managers need their reports... ...if you can fix data entry, you can solve many problems."

- Ian Leaman, Product Manager of AI Products at HubSpot

Multiple interviewed sales technology providers were working on automating such non-selling tasks in order to increase salespeople's productivity. Tact.ai is aiming to make CRM usage more human-friendly by developing an AI-powered "executive assistant" software that can handle data entry and other administrative tasks by using voice or simple text commands. This is able to decrease sales representatives' non-selling time and generally improve their productivity as well as increase CRM adoption significantly. In this case, advancements in natural language processing enable a whole new user interface for sales representatives as using voice is a convenient way for entering data into a CRM system. As a result, sales data quality can be better which furthermore allows utilization of other AI applications on top of the high-quality data. Furthermore, it was emphasized in

the interviews with sales organizations that sales representatives should always have the next sales activity in calendar after the sales discussions have been started with a prospect. Tact.ai's AI-powered digital assistant enables keeping track of such tasks conveniently and it can notify sales representatives to do the right activities at the right time.

> *"So, this executive assistant is going to help me schedule meetings, going to look at my notes and do the data entry for me... ...it's largely a productivity enhancement. Essentially, you're going to have an executive assistant for the sales reps and then the sales leaders will get far more reliable and enriched information."*
> *- Vijay Jegan, SVP of Engineering & Chief Technology Officer at Tact.ai*

4.1.8 Sales funnel management

Different aspects of sales management were also discussed in the interviews with sales organizations. It was commonly agreed that sales leaders' work involves understanding and coordinating the bigger picture as well as being aware of the current situation in order to take supporting or corrective actions. Sales leaders need to be able to diagnose where the current bottleneck is within their sales funnel and where their sales force needs the most coaching. Furthermore, sales management does not involve only managing the current situation but also doing forward planning, such as making sales forecasts for the next quarter and deciding whether new sales representatives should be recruited or should they freeze the headcount for now. Different reports guide sales leaders in decision-making and the data created with sales technology, especially CRMs, was emphasized to be essential for their work and understanding trends that should be taken into account. The importance of data in sales management was emphasized multiple times and making conclusions based on the data was mentioned to steer and prioritise the interviewed sales organization's actions.

> *"They want to see a daily forecast and if there's a drop, what caused it. Was it one individual deal or couple of deals? They want to do forward planning, how are we shaping up for next quarter and if the forecast is low, what's the corrective actions we need to do and what type of action plan we need to do with marketing... ...this type of decision-making is made at the executive level and where organizations utilize CRM systems."*

- Keith Lally, Channel Partner Manager at HubSpot

AI can also contribute significant benefits to sales leaders. CRM providers such as Salesforce and Microsoft have always provided sales analytics to be utilized in sales management and over the years, AI components have been implemented to bring predictive elements to sales reporting and analytics. For instance, AI is able to make sales forecasts that sales leaders can use for coordinating their sales force and budgets optimally. When individual sales processes are aggregated into a sales funnel, AI has more data to work on and this enable sales leaders to see whether certain initiatives have worked or not. For example, Outreach is able to forecast how many meetings a sales representative using their product is going to book by the end of the month and as a result, sales leaders are able to intervene and coach sales representatives if they notice alarming forecasts.

Translated: "Of course sales are led with data... ...over the years AI components have been integrated to analytics and reporting to give predictive elements to them, the world of analytics is combined with AI capabilities. Utilizing historical data so that AI can advise what should be done. That's a big thing in sales."
- Tomas Rytkölä, Senior Manager of Solution Engineering at Salesforce

Fundamentally, AI can help sales leaders to track their team's performance and identify the potential challenges of individual sales representatives in order to coach them in the most effective manner. Insights provided by AI point out things that sales representatives should take into account during sales processes and this supports sales leaders when having 1-on-1s and coaching sessions with their sales force. For instance, Microsoft offers an AI-powered call intelligence feature that utilizes NLP to analyse calls made by sales representatives and it can detect whether a call has gone well or poorly. This enables sales leaders to identify where their sales team needs coaching to become more effective and also replicate the strengths of their individual sales representatives to other sales representatives. Ultimately, AI can enable sales leaders to have a better understanding of what is happening within their sales organizations as well as what is likely to happen next and guide their sales teams accordingly.

Translated: "There's this sales performance and team performance analytics dashboard for sales managers, which gives them an overview of how their sales

team is performing... ...it shows who is reaching their goals and who is underperforming. Then managers can ask if the underperformers need support."

- Axel Paimio, Product Marketing Manager at Microsoft

4.2 Opportunities of utilizing AI in B2B sales

The use cases of AI described in the previous section can give a more concrete picture of how AI can be currently utilized in B2B sales in practice whereas this section aims at painting the bigger picture of how AI could contribute to or even transform B2B sales. When the interviewees were asked about the greatest opportunities of utilizing AI in B2B sales and their visions for the future, multiple different viewpoints emerged. The quite clear consensus was that while there is potential for automation in the context of online commerce and sales of simple products, AI is not going to replace humans in the context of complex B2B solutions sales any time soon. The opportunities of AI lie in enhancing the process in a way or another and even automating some of the mundane and repetitive tasks. In the end, all use cases of AI should aim at enabling B2B sales professionals to focus on the core part of sales that machines cannot perform, human-to-human interactions with the buyers, and also enhance that experience for the buyer as well as the seller.

"I don't see that there will be a single biggest AI feature or AI thing which drives things forward. I would rather see that we can put a lot of small useful features to products which make users' lives easier, more effective, or help them to identify the things they need to spend their time on."

- Tarmo Tali, Vice President of Engineering at Pipedrive

Many of the interviewees highlighted that the role of AI is supportive and coaching. It could bring forth matters to be taken into account in decision-making and recommend the next-best actions that sales representatives could take to advance sales cases. AI would not make the decisions on behalf of salespeople per se but can coach them to make more data-driven decisions and ultimately, it is up to the sales representative whether they want to perform the recommended action or not. However, few of the interviewees thought that in the long run, more and more sales activities could get completely automated due to the rapid development of the technology. Essentially, predictions and insights provided by AI could guide sales representatives to decide what and when to sell to which customers at

what price and recommend the right actions to take to reach their goals. It was mentioned by one of the interviewees that sales can be a good context for applying AI, as there is always a clear goal or success criteria that the AI models can optimize based on data.

> *"So, anywhere in sales, where you're making predictions that can help accelerate revenue, AI should play a role. And it'll be limited to start. But in the next three to five years, anywhere where a prediction is being made by a human, the machine should at least support that or enhance the probability of that prediction being correct."*
>
> *- Paul Roetzer, Chief Executive Officer at Marketing AI Institute*

Another perspective taken on utilizing AI in B2B sales is that AI's main role is not showing salespeople something that they do not know, such as giving lead recommendations, but simply helping them to become more efficient and productive with repetitive and mundane tasks. One of the biggest opportunities of utilizing AI is capturing all relevant sales data more effectively compared to inputting data manually. Traditionally, sales force has spent a lot of time inputting data into CRM systems so that sales leaders can get their sales analytics and reports for managerial purposes. Advancements in NLP enable to extract data automatically from the ground truth source, emails and calls. For example, recording calls and utilizing AI to transcribe as well as summarize them is a way to provide high-quality data, which can also increase salespeople's productivity significantly. As a result, more AI applications can be deployed as the data quality issue is solved by utilizing AI for data entry.

> *"...it just helps people to be efficient. Sales people generally know what they are doing, particularly if they're good. So, anything we can do to basically just help them do the job faster, gets what's in their head into the computer faster so they can do searches quicker and get what they need."*
>
> *- Ian Leaman, Product Manager of AI Products at HubSpot*

It was also discussed that while AI can be utilized to help sales representatives to perform their sales activities better, it can simultaneously enhance the customer experience for the buyer. When buyers are approached with personalised messages and salespeople have a better understanding of the buyer's current situation, the buying experience is

enhanced as well. It was also mentioned that in the future AI could be used to analyse customer's tonality and communications so that sales representatives are able to modify their behaviour accordingly in different selling situations. On the other hand, chatbots can be ready to answer the buyers' questions at any given time and buyers are not limited to salespeople as the only source of information. A potential buyer has an end goal in mind and it's the seller's job to help them get there as fast as possible, in which AI can support the seller. Essentially, sellers need to understand buyers' whole journey and AI could be used to remove friction during the process.

> *"I think the biggest opportunity for AI is personalising the entire selling experience to match the buyer's buying experience. Every buyer has their own buying preferences and buying process. If AI could actually help understand and identify the process that we're going through, I don't know how, but I think there's probably some patterns that you can recognize and then be able to adapt accordingly."*
>
> *- Vincent Lo, Vice President of Product Marketing at Klue*

In fact, when vast amounts of data are collected through different sources and then the data silos are combined, gaining a Customer 360 view becomes one of the biggest opportunities of AI within CRM systems. When salespeople know their customers and their needs, every sales discussion can begin with delivering value instead of starting each time from scratch. It was brought forth that CRM systems have been pretty much the same for the last decades, but the biggest ongoing change is that the amount of data is growing at a rapid pace. This raises the question of what could be done with the data and that is where machine learning, and AI can help. Getting valuable and actionable insights out of data is the biggest ongoing transformation with CRM systems.

> *Translated: "One of the biggest opportunities of AI in B2B sales is gaining a 360 view of customers. Now that we kind of have the tools for it, this kind of 'know your customer' thing becomes really important. It's knowing before the meeting what the customer will want to hear. This will have a big impact; it can help managing customer relationships better."*
>
> *- Axel Paimio, Product Marketing Manager at Microsoft*

All of the opportunities of AI are actually related to gaining value out of the increasing amount of data and tapping into the vast amount of unstructured data with NLP. Moreover, the business environment is becoming increasingly dynamic and simply coding some rules to describe how B2B sales work is simply too difficult and would not represent the real world with sufficient accuracy. Sales organizations need to continuously learn from customer interactions and validate whether something is working or not. Similarly, continuously learning AI algorithms could discover unexpected insights or and point out new actions to take based on recent changes in the data. Furthermore, as AI is able to analyse vast amounts of data to provide insights or automate tasks, combining data from internal sources with external data available on the public web can unleash a new range of AI-enabled sales technology products.

> *"If you start writing rules and you write tens or hundreds of rules and you're still coming up with edge cases, that's a really good fit for machine learning. Machine learning can use the examples from the data to make decisions rather than having to code every edge case."*
>
> *- Ian Leaman, Product Manager of AI Products at HubSpot*

Due to all of these developments and opportunities, AI is going to have a remarkable impact on the role of a sales professional. As described by one of the interviewees, traditionally a sales representative has been good if they can execute lots of simple actions very fast. If AI eventually becomes capable of automating more and more of these repetitive actions, such as sending cold emails, the role of a sales representative becomes more strategic. In this situation, having soft skills such as being good at communicating, mapping customers' needs and finding ways around objections will make a good sales representative. In other words, a lot of execution of simple tasks would get done by AI whereas strategy and orchestration would get done by sales representatives. Meanwhile, sales leaders will get access to improved analytics that will enable them to lead and coach their sales force more efficiently. In the end, human's role is to provide the value that computers cannot provide and AI will free sales professionals' minds to focus on the core of their work, human-to-human interactions and creating value for customers.

> *"I think AI will help to delegate steps within our selling motions and steps within our sales processes that can actually allow us to automate more of the mundane tasks,*

so that we can free up our minds to think more abstractly about how he wants to go about our strategic sale."

- MK Getler, Head of Marketing at Alyce

4.3 Challenges and limitations of utilizing AI in B2B sales

Although AI has a great potential to contribute to B2B sales, there still remains many challenges before AI can be strongly adapted in B2B sales, according to both interviewed sales organizations and sales technology providers. The challenges articulated in the interviews could be categorized into cultural and organizational challenges as well as technical challenges. Organizational and cultural challenges circle around matters such as lack of awareness of AI among sales professionals, false perceptions about AI and required change management to influence the resistance towards new tools and ways of working. On the other hand, technical challenges involve issues related to data and technical development of AI-enabled sales technology. Both sales organizations' and sales technology providers' views aligned fairly well although technology providers had slightly more detailed insights on the topic especially from the technological point of view.

4.3.1 Cultural and organizational challenges

It was commonly agreed by the interviewees that general awareness and understanding about AI is still quite low among sales professionals, which is a great challenge for adaption of the technology. It was noted that the early adapters tend to be larger software companies with sufficient sales processes and high-quality data who are also inherently more tech-savvy and innovative. While salespeople are generally intrigued by the concept of AI, they do not yet know how to use it to their benefit in their day-to-day work. Sales technology providers have a great responsibility in educating sales organizations about the potential benefits they could gain by utilizing AI and helping them to achieve those benefits. One of the interviewees brought forth that as a sales technology provider, they should invest more in making sales organizations more aware of AI's potential and as a result many of the adoption challenges could be tackled.

Translated: "Given the current capabilities of AI, it is surprising how little it is utilized to enable every organization to have real-time situational awareness

about what are the most potential companies to convert into customers at this moment for a certain offering."

- Lauri Heiliö, Country Manager at Vainu

Furthermore, it was brought forth by multiple interviewees that salespeople's perceptions about AI are often false and do not align with reality. People could have inflated expectations because they have seen showcases of AI in the consumer markets whereas B2B sales is a very complex and sophisticated context that is more difficult to automate or enhance with AI capabilities. Implementing AI is often viewed as a matter of the future that can disregarded in the present and postponed for future examination, which does not exactly align with the current state and capabilities of AI. Additionally, AI is often seen as an excessively technical topic by salespeople, while AI should actually be implemented driven by the business case and the end-users do not even have to know what AI model is powering the tools they are using.

"Just understanding what AI is, we just need people to care about that. If enough marketing and salespeople understood what was possible, they would care more to go learn how to apply it. Until the desire to find smarter tools exists, we are going to continue to have a lack of adoption in the industry."

- Paul Roetzer, Chief Executive Officer at Marketing AI Institute

In fact, it was mentioned multiple times in the interviews that business case and processes should always come first when AI-based sales technology is implemented and those must align, or the tools will always remain underutilised. AI essentially must become a part of the sales process that the sales representatives are performing, and it must be value-adding for their work. As noted by one of the interviewees, it is easy to tell what AI could do on a PowerPoint presentation, but it has to be linked to customer's business in order to see if it can actually contribute any added value. Moreover, one of the interviewees brought forth that it does not matter which particular technology is used, whether it is deep learning or NLP, as long as it benefits the end-user. When the use case is known, suitable technologies exist to choose from to solve that particular business challenge. In the end, it's really the mindset that matters more than the technology as implementations are more likely to fail if they are not business driven. Furthermore, it was also brought forth that often a simple rule-based solution is sufficient for some use cases,

and AI should not be implemented just for the sake of implementing AI. It does not matter for the end-user whether a product utilizes AI or not, they only care if it helps them to do their job better.

> *"If I could get a schematic of how every single person's sales process works, that would be the easiest way (to implement the product), because then we can look for those moments where we could insert ourselves in a way that's not disruptive, but complementary to that process."*
>
> *- MK Getler, Alyce*

It was highlighted that cultural challenges are often faced when implementing AI to support B2B sales and this might require even more change management than implementing any previous sales technologies. Many salespeople are very strongly set up in their traditional ways of working and they are confident in their opinions about the best actions to take in their work. Therefore, they might not be open to listening to suggestions or recommendations provided by AI as certain choices in their work are emotional decisions for them. The issue is that sales professionals might not have sufficient trust in the recommendations provided by AI to actually guide them to make better decisions. For example, it was mentioned by one of the interviewees that salespeople have hard time trusting in pricing recommendations provided by AI and they tend to trust more in their own intuition compared to suggestions of a machine. Taking actions based on insights or recommendations provided by AI naturally involves risks when making important decisions and this may also detach salespeople from feeling ownership over their own work.

> *"Traditional salespeople are very much set in their ways to an extent that they're not always open to listening to suggestions... ...So I think there is a little cultural education needed, that data can actually help. And then it's not like taking power away from them, it's actually providing them with additional information and insights to help them make better decisions.*
>
> *- Pavel Dmitriev, Vice President of Data Science at Outreach*

Therefore, establishing a trust in the machines will be a common challenge within many B2B sales organizations. Change management is required to educate salespeople that

data and AI can actually help them in their work and that AI is not about taking power away from them but helping them to make better decisions. It was addressed that sometimes implementing a new piece of technology requires rethinking the current sales process and AI requires that the redefined process is adhered more thoroughly. Furthermore, another interviewed sales technology provider mentioned that sometimes organizations' sales processes are so rudimentary that implementing a new systematic process and utilizing a sales technology is challenging.

> *"Sometimes we'll need to do some real change management with the sales team to help them get more comfortable with what we're doing. To address that, we include some consulting services in our rollout. It's not because we want to be a consulting company, but we know that there are certain things we need to help them do, so that they're actually going to use the software the right way and get value from it."*
> *- Alex Hoff, Senior Vice President of Product Management at Vendavo*

It was emphasized multiple times how important it is to get everyone onboard with such sales technology implementations, both sales representatives as well as sales leaders. If sales leaders decide to implement an AI-powered sales technology while sales force does not view it as valuable and is not ready adapt it, the implementation is most likely going to fail. On the other hand, if sales leaders are not ready to support the implementation and go through the required change management, the implementation is similarly more likely to fail.

> *Translated: "This is a cultural issue; it is essential to get everybody on the same boat. And if you don't, it usually happens because the end-user does not see value in the system."*
> *- Tomas Rytkölä, Senior Manager of Solution Engineering at Salesforce*

Ease of use was highlighted as important matter for successful adoption as if salespeople are not comfortable with their tools, they will find a way around it. One of the interviewees articulated well that if sales teams are not supportive of the concept due to difficulty to use the product, implementation does not really yield much benefit at all. However, sales technology providers have aimed at making their products as easy to use as possible so that technically they generally come out-of-the-box and do not require any AI

knowhow from sales organizations for implementation. Cross-integration of sales tools was also brought forth also as an important way to streamline workflows and enhance usability of the tools.

> *Translated: "We have a lot of customers who use Leadfeeder through a CRM integration and then the sales representative does not ever see our product but uses it through their CRM system... ...if they utilize a CRM, deploying our product is easier when we don't need to cram a new technology, they can just use the old tools. It has been very important for many customers."*
>
> *- Herkko Kiljunen, Chief Technology Officer at Leadfeeder*

It was also addressed that poor adoption of AI-based sales technologies can be an internal training issue. Salespeople need to be onboarded effectively and they need to be educated about how the machine is trained and how its recommendations get better over time. Salespeople need to understand that improving AI is still going to require human intuition in the near term and salespeople need to tell the machine whether its recommendations are good or bad. When salespeople are bought into the long-term vision, AI can become better over time if salespeople are persistent with how they utilize the technology.

> *Translated: "In fact, artificial intelligence is supporting intelligence. It can support in decision-making, but it requires humans to guide it into right direction in order to make it smarter."*
>
> *- Janne Sipilä, Sales Director at Microsoft*

Lastly, it was brought forth that many sales organizations would need a better experimentation culture, as adoption of AI could happen most conveniently through small experiments and testing whether different AI applications could be beneficial to them. Furthermore, it was mentioned by one of the interviewees that since AI is an unknown territory for many companies' sales organizations, they are afraid to invest into it. If companies do not bother to experiment with AI due to budgetary constraints, the adoption is going to happen slowly. It is likely that AI adoption will increase in B2B sales organizations when they are able to see positive return on investment for implementing AI-based sales technology and this requires agile experimentation.

Translated: "...visionaries with executive capacity are needed. This requires agile "start small" type of thinking, which will lead this (AI in B2B sales) forward."

- Toni Korppi, Director General Business at Salesforce

4.3.2 Technical challenges

The importance of having sufficient amount of quality data in order to utilize AI in B2B sales was highlighted in most of the interviews and this is going to be a significant obstacle for many sales organizations before they are able to utilize AI within their sales processes. For example, utilizing an AI-powered application such as predictive lead scoring requires certain number of leads from a certain period of time before a machine learning can be trained to estimate the relevance of new sales leads. Without sufficient amount of data, AI algorithms are not able to become adequately reliable. It was brought forth that most B2B sales organizations lack the sufficient amount of data to make any sort of predictions and as a sales technology provider it could be hard to explain that their models might not work equally well for different customers depending on their data maturity. It was also mentioned multiple times that AI is often more applicable in consumer markets due to bigger amount of available customer data related to their buying behaviour.

Translated: "There needs to be a certain number of leads from a certain period of time to be able to utilize machine learning models. As we have discussed, data is the alpha and omega and especially important when it comes to AI."

- Tomas Rytkölä, Senior Manager of Solution Engineering at Salesforce

Furthermore, even with seemingly high amount of data, the data might not be clean enough to be utilized effectively. This is especially the case when the data has been inputted into a CRM system manually by sales representatives, which is error prone and some data points might not be filled consistently enough. It was brought forth by one of the interviewed technology providers that many companies struggle with data quality as they need to turn their data lake of unstructured and messy data into canonical data sets that are harmonised so that the data can be utilized effectively by AI applications.

However, sales technology providers have also started to provide tools that enable their customers to test conveniently whether their data is of sufficient quality for utilizing a certain AI application. Furthermore, one of the interviewed sales technology providers

offered processing and normalising raw data for analytic purposes so that their customer sales organization do not need to worry about fixing their data quality and as a result, the product can be implemented quicker. In fact, adapting AI in B2B sales could happen more rapidly if sales organizations could start experimenting with even littler amounts of data instead of spending a lot of time to fix their data quality excessively rigorously. Nevertheless, the required amount of data and its quality depends on the use case.

> *"They think they got to make their data perfect before they can use AI and that's not true. So, it has to be good enough, but it doesn't have to be perfect."*
>
> *- Alex Hoff, Senior Vice President of Product Management at Vendavo*

Even when sales organizations have the data in place, utilizing data and AI involves issues related to privacy and ethics. It was discussed by multiple interviewees that many B2B organizations are very attentive over how their data is utilized, and they have certain information security requirements that sales technology providers must address. A significant portion of data within sales organizations is sensitive, and for example, accessing customer sales organization's email client for data should be done in a way that does not collect individual employees' usernames or passwords. Dealing with company-specific data is not a big challenge from a privacy standpoint, but data related to individual contacts involves personally identifiable information, which is more sensitive and subject to regulations such as GDPR. When AI is used on a more personal level, individual people need to have the chance to opt-out from automatic decision-making and the challenge is how to balance security and privacy with effectiveness.

> *"Doing all of this without freaking people out from an information security standpoint, that's another challenge... ...so there are strategic things we did to be able to do what we need to do without requiring too much access to their data."*
>
> *- Vijay Jegan, SVP of Engineering & Chief Technology Officer at Tact.ai*

Given the current technical limitations of AI, it can be mostly utilized in relatively simple rule-based tasks, whereas many sales activities performed by salespeople require understanding the particular sales context and involve plenty of tacit knowledge. One of the interviewed sales technology providers mentioned that some of the AI models they developed worked well on training data but failed in production due to varying dynamics

in B2B sales, which essentially require human understanding. It was also mentioned that enterprise customers have slightly different sales cycles and processes, which could require configuring a product to fit customer's individual needs more accurately, which was one of the biggest challenges for one of the interviewed sales technology providers. It can be concluded that AI is the most useful when data is aggregated - AI is able to analyse a whole sales funnel more accurately compared to analysing an individual sales process.

> *"...aggregate level is needed. If it's important to make forecasting accurate, AI is useful. The more granular level you go within a singular sales opportunity or customer, the more challenging it becomes."*
>
> *- Toni Korppi, Director of General Business at Salesforce*

NLP's potential for B2B sales was highlighted in the interviews, but the technology is still not widely available for less-spoken languages, which was especially pointed out by the interviewed Finnish sales organizations. International organizations with English as official work language are likely to progress more rapidly with AI while other languages are going to be supported in the long run. It was brought forth recent advancements in deep learning and transfer learning as well as pre-trained language models released by big technology providers can enable sales technology providers to develop multilingual NLP models in higher quality. While this opportunity has not been yet fully realized in the industry, it could accelerate utilization of NLP in B2B sales in the near future.

> *"Even five years ago it would have been almost an impossible task for a small company to do something like this in 100 languages, even in 10 languages… …multilingual language models are of course an active area of research, but they are from our experience pretty good. So, it is actually not that hard anymore in many of these NLP applications to go from one language to 100 languages."*
>
> *- Pavel Dmitriev, Vice President of Data Science at Outreach*

However, it was also discussed that processing human language and its subtleties can be difficult for NLP as people often mean different things than what they say. For example, if a prospective customer replies 'I'll get back to you', that might be just a polite way to say no in the sales world, which machine is not able to interpret as well as humans can. As addressed by one of the interviewees, there will always be variables in human nature that

AI cannot quite absorb, and this is one of the challenges for utilizing AI in a human-centric business context such as B2B sales.

> *Translated: "...if there is a situation where AI gets stuck when facing a corner case that has not been thought about in advance, there is a bit of pain for the customer when they just want to deal with a real person."*
>
> *- Markus Nuotto, Vice President of Sales Operations at Aiven*

This kind of corner cases occur also outside NLP use cases and they will be a challenge for implementing AI in B2B sales. Ultimately, a human still needs to look at the situation as there could be things that are not in the data yet and AI cannot take these matters into account when giving recommendations. As B2B sales processes are quite complicated, various corner cases must be handled correctly before sales activities could be automated. Errors in use cases such as automatic information extraction would be relatively harmless, but incorrect recommendations or automated actions could cause significant financial or reputational harm in more complex sales activities.

Lastly, the need for having explainable AI was commonly highlighted by the interviewees and this needs to be addressed when AI-enabled sales technology products are developed. Sales professionals want to understand why AI has given certain recommendations and AI-based sales tools must be able to communicate and explain why a recommendation has been made. As brought forth in the interviews, salespeople will go back to their old ways of doing things if they do not understand how AI makes its recommendations. While developing explainable AI models is technically more difficult, it is essential for tackling the black box problem that creates an adaption challenge for utilizing AI in B2B sales.

> *"We believe that the salesperson is more likely to take that guidance or take that recommendation, if they understand the premise on which it is based, or at least some sort of defence of the rationale... ...So we believe that you got to have some explainable AI, otherwise people will not use it."*
>
> *- Alex Hoff, Senior Vice President of Product Management at Vendavo*

5 Discussion

The aim of this chapter is to discuss the results of the empirical part of the study. At first, summaries of answers to the research questions are presented and they are then compared with existing academic literature discussed in the theoretical part of the thesis. Second, theoretical contributions of the study are derived from comparing the results with existing literature and managerial implications of the study are discussed. Lastly, the limitations of the study are addressed and potential future research topics are suggested.

5.1 Summary of answers to the research questions

This study aimed at exploring what kind of impact AI could have on B2B sales and approached the topic with two research questions. The first research question, *how AI can contribute to B2B sales*, was addressed through two sub-questions: *what are the different activities of modern B2B sales* and *how AI can contribute to the different activities of B2B sales*. These questions were addressed in section 4.1 and the results are summarized below in Table 3.

Table 3: Summary of B2B sales activities and respective AI use cases

Sales stage or groups of activities	**Activities of the selling organization**	**Respective AI use cases**

Customer selection	• Market research and identifying ideal customer markets & profiles that match the value proposition
	• Identifying & generating leads for sales to process
	  ○ Marketing
	  ○ Online channels
	  ○ Partner networks
	  ○ Email contacting
		• Marketing automation
		• Identifying website visitors
		• Conversational AI
		• Finding and suggesting more similar companies
		• Predictive lead scoring
		• Sentiment analysis of replies

Opportunity identification	• Identifying sales opportunities
	  ○ Meeting and having discussions with leads
	  ○ Mapping leads' needs, requirements and challenges
	  ○ Communicating own value proposition
	• Customizing sales materials
		• Predictive opportunity scoring
		• Recommending actions to advance sales opportunities
		• In-meeting assistance for prospecting

Solution development	• Utilizing previously gathered information to develop and demonstrate a solution to individual prospect's challenges
	  ○ Delivering a solution proposal with initial pricing
	  ○ Performing a demo
	  ○ Creating a proof of concept
	  ○ Calculating the business case
		• AI-enabled pricing and pricing model recommendations

Preference building	• Using reference cases to build preference
	  ○ Calls between customers
	  ○ Independent review platforms
	• Competitor and market analysis
		• AI-enabled competitive intelligence

Agreement	• Closing of deals • Contract and price negotiations • Configuring the sold solution in detail as agreed	• In-meeting assistance for closing • Deal state information, evaluation and forecasting
Customer success	• Ensuring that sold value is realized for the customer • Identifying additional value creation opportunities, cross-selling and upselling	• Churn prediction models • Relationship analytics • Whitespace analysis

Activities occurring throughout the sales process	• Tasks related to relationship building and communications requiring interpersonal skills
	• Administrative tasks
	  ○ Organizing own work, such as calendaring meetings and creating tasks to do
	  ○ Turning tacit knowledge into organizational knowledge by inputting data into a CRM system
		• Enhancing relationship building and communications
		  ○ Personal business gifting
		  ○ Highlighting relevant talking points with contacts
		  ○ Highlighting who from own sales organization knows the contact to allow better preparation
		• Administrative tasks
		  ○ Digital sales assistant
		  ○ Business card scanner
		  ○ Automatic data extraction from emails and calls into CRM system
		  ○ Enabling voice as new user interface for using sales technology
		  ○ Enhancing general usability and productivity of sales tools

Sales funnel management	• Strategic planning • Coaching sales teams and individual salespeople • Identifying bottlenecks within sales funnel and solving them • Forward planning	• Sales forecasting • Improving analytics with predictive elements • Tracking team performance and providing more efficient coaching

The second research question, *what are the biggest opportunities and challenges of utilizing AI in B2B sales,* was addressed in sections 4.2 and 4.3. The opportunities of AI are naturally brought forth through the different use cases of AI, but there were also certain high-level themes that summarize the potential benefits of AI in B2B sales well. First of all, in the context of selling complex B2B solutions, AI is not going to replace humans any time soon but can enhance their work and also automate some of the mundane tasks. As a result, sales professionals can put a better focus on the core of their work, human-to-human interactions with potential buyers. The role of AI is coaching, it can make predictions and give recommendations to enable data-driven decision-making, but it does not make decisions on behalf of the sales professional per se.

AI will likely increase sales professionals' productivity in multiple ways. In addition to making predictions and giving recommendations, embedding AI models into sales technology products can allow improved usability and reduce the amount of required manual work. Advancements in NLP enable data extraction directly from emails and calls which can eliminate the need for inputting data manually into CRM systems. This development could solve the traditional data quality issues and as a result, enable more AI applications on top of the higher-quality data. Furthermore, AI-enabled digital assistants can allow sales professionals to organize their own activities more productively and AI enables voice as a new user interface to utilize sales technology more conveniently.

While AI can make sales professionals' life easier, it can also enhance the buying experience. AI can enable sales professionals to know their customers better and personalize their approach accordingly, which simultaneously enhances the buying experience as well as increase sales professional's likelihood to succeed. Furthermore, AI-enabled chatbots can be ready to answer potential buyers' questions at any given time and they do not have to rely on sales professionals as the sole source of information. As a long-term vision, AI could eventually help sellers to understand their buyers' buying processes better even in B2B context, but such solutions do not exist on the market at this time.

To conclude, all the opportunities stem from AI's ability to enable more efficient data extraction as well as being able to analyse and gain value out of the increasing amount of customer and sales data. Furthermore, AI could be more capable of adapting to the dynamic business environment compared to traditional rule-based software. Fundamentally, AI could change the role of a sales professional as it enables them to focus on more strategic thinking and work whereas AI could perform the execution of simple routine tasks.

On the other hand, the challenges of implementing and utilizing AI in B2B sales involve both cultural and organizational challenges as well as technical challenges. Cultural and organizational challenges are related to lack of awareness and false perceptions about AI among sales professionals as well as required change management to influence resistance towards new tools and ways of working. Creating awareness and understanding about how AI could be utilized in B2B sales is the first challenge that needs to be addressed in the industry. Given the current state of AI, the adaption rate of AI in B2B sales is still low and sales technology providers have a great responsibility in educating sales professionals about the benefits they could gain.

Once the genuine interest towards AI has been evoked among sales professionals, there are number of reasons why implementations could fail. First of all, implementation of sales technology should always support the sales process. If sales professionals do not trust the recommendations or actions performed by AI and do not perceive the new tools as valuable for their work, adaption challenges are likely to emerge. Furthermore, implementation of AI could also require redefining the process and ways of working in a way or another, which easily creates change resistance among salespeople. Essentially, this will require change management and sales leaders need to get everyone onboard when implementing such AI-enabled sales technologies.

The technical challenges involve issues related to data and technical development of AI-enabled sales technologies. Firstly, AI algorithms require plenty of sufficiently clean data, which many sales organizations are lacking. When the data is in place, privacy and ethical concerns need to be addressed when AI-enabled sales technologies are developed and implemented. AI is yet an emerging technology and it can be mostly utilized in relatively simple tasks whereas various corner cases could occur when AI is utilized in more complex use cases. Also, processing unstructured textual data is still challenging especially in the context of less-spoken languages. Lastly, developing explainable AI

algorithms to avoid the black box problem is technically more challenging compared to developing black box algorithms.

5.2 Comparing results with existing literature

The results of this study matched fairly well with contributions of existing academic articles on utilizing AI in B2B sales. However, this study's research design was significantly different compared to studies by Syam & Sharma (2018) and Paschen et al. (2020). These previous studies used the 7-steps of selling framework to link different AI use cases to different sales activities throughout a sales funnel. However, due to lack of methodological explanations and empirical findings, these studies remained on a more theoretical level and had fewer practical implications compared to this study. While these studies successfully explored what AI could be capable of doing in B2B sales in theory, their implications did not fully reflect the current reality and how AI can be utilized in practice in the B2B sales context. This study examined how B2B sales are conducted in practice and even evolved an existing sales framework to reflect the reality better in order to be able to place different AI use cases to categories that actually represent how B2B sales are conducted nowadays. As a result, more AI use cases that are currently used in the industry were recognized and a more holistic view of AI's impact on B2B sales was gained.

The results of the study aligned well with most opportunities of AI proposed by Syam & Sharma (2018). The greatest potential of automation is within standard and repeatable sales activities and the role of AI is to be a coaching and supporting decision-facilitator for the sales professionals. However, although they brought forth multiple use cases of AI that were identified in this study as well, some of the proposed use cases such as utilizing augmented reality to demonstrate seller's offering were not recognized in the scope of this study. Furthermore, they suggested that the greatest impact of AI would be in simulating and understanding behaviour of buying centers and their buying processes, which does not reflect the results of this study. While this argument related to understanding buyer behaviour is increasingly important and possible in B2C markets due to more available data related to individual customers' behaviour, this is not an area of B2B sales that AI could handle on behalf of humans any time soon. Understanding customers and how they buy in B2B solution sales is still going to require more human-to-human interactions far into the future and respective AI use cases have not yet emerged.

The results of this study also matched with the viewpoint that ultimately AI will enhance the work of humans instead of replacing them in the context of B2B sales (Paschen et al., 2020).

Most managerial considerations proposed by Paschen et al. (2020) related to utilizing AI in B2B sales were also aligned with the results of this study. However, their study suggested that sales organizations need to support their customers through the transition when B2B sales processes are enhanced with AI, which is a statement which this study does not support. This was not raised as an issue by a single interviewee and in fact it was mentioned that customers usually perceive it simply positively if interactions are streamlined and buying becomes easier. Also, the identified challenges of utilizing AI in B2B sales matched fairly well with previously defined pre-requisites or challenges related to implementing AI in any business context (Kumar et al., 2019). Generally highlighted pre-requirements in existing literature such as data maturity, alignment with business goals and privacy requirements seemed to apply to the implementation of AI in the context of B2B sales as well.

Singh et al. (2019) proposed that in the context of sales, AI will have an impact on value creation with customers, the role of individual sales professional and sales organizations on an organizational level. Although this thesis examined utilization of AI on a more operational level through the lens of a B2B sales process, the findings of the thesis could be linked to these three dimensions. For example, when AI is utilized to have a better understanding of an individual customer and their situation, the value creation for them can be enhanced remarkably. On the other hand, the results of this study imply that the role of an individual sales professional could become more strategic if or when AI is able to handle more and more of the repetitive and mundane sales activities. Also based on the results of this study, AI could impact structures of sales organizations if less human work is needed at the early stage of B2B sales. Singh et al. (2019) also suggested dozens of research questions and priorities related to these topics and results of this study provide answers to many of the suggested research questions at least implicitly. However, as their article was written solely based on workshopping between researchers, the proposed research priorities did not exactly reflect the actual priorities perceived in the industry.

5.3 Theoretical contribution

This study is the most comprehensive research conducted on the topic of utilizing AI in B2B sales until this day and it is backed by empirical evidence gained through interviews with industry experts. Unlike previous academic research on the topic (Syam & Sharma, 2018; Paschen et al., 2020), this study examined the impact of AI on more complex B2B solution sales which require plenty of human-to-human interaction per se. Furthermore, the study did not examine AI and its use cases as an unattached phenomenon but linked them directly to the operational level of conducting B2B sales as well as identified which activities of B2B sales AI is actually capable of enhancing or even automating and what aspects of B2B sales require human touch far into the future. The results of the study verify some contributions of previous studies on utilization of AI in B2B as well as found some inaccuracies within these existing articles (Syam & Sharma, 2018; Paschen et al., 2020). Moreover, the findings of previous studies on implementing AI in the business context (Kumar et al., 2019; Davenport & Ronanki, 2018; Ross, 2018) seemed to align well with the results of this study, which indicates that most theories related to utilizing AI in different business functions are applicable in the context of B2B sales as well.

The aim of this study was to create a holistic as well as realistic overview of how AI can be utilized in B2B sales. While a long list of suitable use cases and opportunities of AI were identified as in previous studies (Syam & Sharma, 2018; Paschen et al., 2020), also the challenges and limitations were extensively addressed in the scope of this research. Therefore, this study contributed to existing research (Syam & Sharma, 2018; Paschen et al., 2020; Singh et al., 2019), by providing more actionable information on potential stumbling blocks of AI implementations in the context of B2B sales. This understanding is essential in order to eventually seize the biggest opportunities of AI in B2B sales. Furthermore, the findings of this study also bring forth what activities of B2B sales can be performed by AI and what activities remain to be performed by humans in the foreseeable future.

In fact, this study lays a foundation for examining how the sociotechnical change, replacing or augmenting human labour with AI, will impact the context of B2B sales and work of B2B sales professionals, which was brought forth as an important research topic by Singh et al. (2019). While this was not the focus point of the study, clear implications can be found within the thesis. As Makarius et al. (2020) put it, adopting AI differs significantly from adopting any previous technologies as adopters need to consider

cognitive, relational and structural complexities that demand social processes in order to integrate AI with employees. As the results of this study bring forth, implementing and gaining value out of AI is not either a straightforward process in the context of B2B sales and AI is likely to impact the role of sales professionals. Integrating AI with employees successfully can result in sociotechnical capital (Makarius et al., 2020), which could be the next big competitive advantage that the most advanced sales organizations can leverage.

Moreover, this research also contributed to the existing sales literature and especially to value-based selling literature (Töytäri, 2018) by utilizing the framework in the context of complex B2B software solution sales. The results of the study concretize the framework by linking it with how modern B2B sales are currently performed in the B2B software industry and the framework was validated as a suitable lens for conducting case study research on B2B sales. However, the existing framework did not fully represent how modern B2B sales are conducted. Therefore, customer success was suggested a separate stage at the end of a sales process, which aims at ensuring that sold value is realized for the customer as well as identifying additional value creation opportunities in the business relationship. Additionally, relationship building and communication activities as well as administrative activities were recognized as two groups of activities occurring throughout a B2B sales process.

These findings bring forth well what is currently happening within B2B sales processes as current academic sales research might not fully reflect what activities B2B sales professionals perform in their daily work. For example, administrative tasks such as inputting and updating data in a CRM system may have been considered as non-selling activities, but they are becoming a part of the job description in modern B2B sales organizations. The results of the study provide a valid and up-to-date description of the different activities happening within B2B sales processes in software solution sales.

5.4 Managerial implications

The findings of this study can help sales leaders to gain an understanding of how AI could contribute to their organizations' work and what are potential benefits they could gain. As noted by one of the interviewed sales leaders, there are so many different sales technology offerings available on the market, that it is actually hard to decide what are the tools worth implementing and utilizing. The study aimed at providing concrete and actionable information on the topic as well as painting the bigger picture of how AI could holistically

contribute to B2B sales throughout the sales funnel. The results of the study bring forth that there are multiple potential use cases of AI that could be utilized to enhance B2B sales throughout the sales funnel and this information enables sales leaders evaluate which of the AI applications could be the most beneficial for their organizations and add most value to the work of their sales force. It is also essential for sales leaders to understand that the role of sales professionals could become more strategic once AI is able to handle the most repetitive and simple sales-related tasks.

However, given the current capabilities and potential of AI, the technology is yet very poorly adapted in the industry among B2B sales organizations. There are various reasons for this, but lack of awareness was highlighted as one of them by multiple interviewed experts on the topic. This is the challenge that could be tackled by researching the topic and making more information available for sales professionals, both sales leaders and salespeople. Readers of this study can become more aware of how AI can be currently utilized in B2B sales and how it is going to impact B2B sales in the future. This knowledge could lead to genuine interest towards the topic and eventually to implementing such solutions. In the future, AI will most likely have an influence on B2B sales in a way or another and sales professionals should be equipped with sufficient knowledge to be ready for it.

Nevertheless, implementing AI in B2B sales is not straightforward and various challenges still exists on the way to gaining value out of it. Therefore, this study also aimed at addressing the potential challenges and limitations of utilizing AI in B2B sales that sales leaders should be aware of. Once the awareness and interest have been evoked among sales professionals, they need to comprehend how implementations should be made in practice. Fully understanding the potential challenges gives sales managers a more realistic view of how to gain value out of AI and this awareness should guide their AI-enabled sales technology implementations.

One of the most noteworthy managerial implications of this study is that the biggest challenges of successfully implementing AI in B2B sales are cultural and organizational. While the technical challenges are mostly being solved by sales technology providers, sales organizations need to have an experimental mindset to gain value out of AI. When AI is implemented to enhance sales processes, it may require rethinking previous ways of working which naturally may create change resistance. Therefore, sales leaders need to carefully evaluate where AI could add value for their sales teams and this needs to be communicated clearly to the employees. Sales professionals need to understand that AI is

not here to take their jobs away from them, but to help them in their daily work and sales leaders need to convince them about this for successful implementations.

5.5 Limitations of the study

This thesis was conducted as a qualitative multi-case study and the limitations of the study inherently stem from the empirical data, selection of interviewees and case companies. As pointed out by Dubois & Gadde (2002), the validity of case studies is limited since they do not allow generalizability of the studied phenomenon as they rely on analytical inference instead of statistical inference and because they do not allow testing the theory extensively. Such is the case with this study as well and therefore, few important limitations are addressed.

First of all, half of the interviewees were Finnish due to easier accessibility to interviews, which had a significant impact on the empirical data. It was remarked in the interviews that Finnish companies tend to be slow with adaption of new technologies, especially AI. Different case sampling, such as interviewing only American sales organizations or sales organizations that have already implemented AI, could have brought forth different aspects and insights into the research problem. However, the sales processes did not vary greatly between the interviewed B2B software organizations, as there are certain industry standards that most sales organizations follow.

Second, case sampling of interviewed sales technology providers had a remarkable impact on the results of this study. Interviews were conducted with 11 different sales technology providers that had distinct offerings, which is a great number of cases for qualitative research, but there still exists more companies with different product offerings and ways of utilizing AI in B2B sales. Interviewing more sales technology providers could have contributed more important findings related to the research questions but expanding the already very wide research scope would have been challenging. Moreover, although there are multiple sales technology providers that have developed e.g., conversational AI for B2B sales, similar companies were not interviewed as gaining an overview of different use cases of AI was the priority in the study instead of achieving theoretical saturation on certain use cases of AI. Interviewing multiple more similar sales technology providers could have provided different viewpoints to the same use case of AI and this could have enabled making more comprehensive conclusions.

Lastly, conclusions of this study are a function of the time in which it was conducted, which is especially the case with studies related to technological development (Dubois & Gadde, 2002). Rapid advancements are being made in AI technology which will have significant impact on sales technology in the near and far future. The findings of this study, novel at this time, could be self-evident in ten years once the technology advances and gets more strongly adapted in the industry. As Seymour et al. (2018) put it, information science studies play catch-up with how applications of novel technologies are utilized in the industry, and it is likely that this study will not be completely up-to-date information on the topic in the near or farther future.

5.6 Suggestions for future research

As the sales technology industry is developing rapidly and AI is being utilized in more and more products, reviewing the situation in five to ten years would likely provide new insights into how AI has been utilized in B2B sales, which opportunities of AI have been realized in practice and whether new use cases or opportunities have emerged. While new use cases of AI are likely to emerge in the future, this study could not address even every single current application of AI in the context of B2B sales due to wideness of the topic. If researchers find gaps between this study and what is happening in the industry, those gaps can be filled by researching the unexplored areas in future studies.

Furthermore, this study aimed at gaining a high-level overview of how AI will impact B2B sales while the singular use cases and contexts were not examined in great detail. Therefore, future research could be focused on a narrower research topic, such as how AI is going to affect customer selection or how AI can contribute to sales management. Researching such topics would most probably provide more concrete and actionable insights into gaining value out of AI with distinct use cases and this kind of research can become more feasible once the adaption of such technologies grows in the industry. Moreover, having detailed research on distinct use cases of AI could enable sales leaders to evaluate what AI use cases are the most valuable for their own sales organizations.

While this study combined insights of how B2B sales organizations perform their sales on an operational level with different use cases of AI, the interviewed sales organizations were far away from strongly integrating AI to support their sales. When the technology develops further in the future and adaption of AI increases in the industry, it

would be interesting to conduct a case study with sales organizations that have adapted AI very strongly. This would probably provide even more concrete insights into how AI could transform sales organizations as well as individual salesperson's work and how the sociotechnical change looks like in the context of B2B sales. Moreover, in further future, more quantitative research on benefits of AI in B2B sales could be conducted once sales organizations have gained value out of the technology and the results can be examined through quantified metrics.

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Appendix A: Interview framework for sales organizations

1. What is your professional background and what is your current role?
2. Could you shortly describe the company you're working at?
3. Could you describe how your sales organization is structured?
4. Could you describe your organization's sales processes on a high level?
5. How are your sales leads generated?
6. What kind of interactions you have between your sales force and your potential clients?
7. After establishing a clientship, what are your processes for account management?
8. Which part of the sales process has the most repetitive and time-consuming tasks?
9. What sales technologies do you utilize in your sales processes?
10. What kind of data you collect of your sales process?
11. Are there some clear challenges with utilizing sales technology and tools?
12. How does your sales force generally views these sales tools?
13. How utilization of sales technology affects the work of your sales organization on different hierarchical levels?
14. Have you utilized AI-enabled sales technology to enhance your sales?
15. What kind of potential use cases do you recognize for AI technology in the context of B2B sales?
16. Do you think AI could contribute to each stage of the traditionally human-centric process?
17. In the context of B2B sales, can we shift more decision-making from humans to machines?
18. Do you think salespeople are generally aware of AI and how it could support their work?
19. Do you think B2B sales could be automated with AI or where do we require human touch the most?
20. Any last thoughts on the topic, what is your vision for the future?

Appendix B: Interview framework for sales technology providers

1. What is your professional background and what is your current role?
2. Could you shortly describe the company you're working at??
3. What sales activities of a B2B sales process your product can enhance, optimize or automatize?
4. What kind of customers' challenges does your offering solve?
5. What are the key benefits your clients can gain by utilizing your product?
6. How do you utilize AI in above mentioned topics?
7. What other potential use cases do you recognize for AI in the context of B2B sales?
8. What applications of AI are the most applicable in sales?
9. What kinds of companies do you have in your client base?
10. What kind of understanding and knowhow of AI do your customers have?
11. Do companies have some kind of prerequisites for adapting your product?
12. Are there some challenges your customers might have with utilizing your product?
13. How utilization of AI-based products could be made as easy as possible?
14. Where do you see AI having the biggest impact during the sales funnel?
15. What are the biggest opportunities of utilizing AI in B2B sales?
16. What are the biggest challenges of utilizing AI in B2B sales?
17. What is your vision for the future: what kind of impact will AI have on B2B sales in the future?